

Certificate of controlled fill

Site: Lot 2249 Hamilton Court, Mount Barker
Job No: 274804- S52672 Blefari Stage 5, MOUNT BARKER, SA 5251
Date: 13/01/2022
Revision No: A

Site earthworks

Site preparation within the area certified as being 'controlled fill' [the extent of which is defined by the area hatched in red on Greenhill Drawing No. 20-2458-002 Rev 0, and fill was placed and compacted under the supervision of FMG Research between 30/03/2021 and 8/10/2021.

The topsoil, vegetation, and any existing 'uncontrolled fill' was removed. The surface was confirmed to be 'natural ground' then proof rolled to verify a firm stable base prior to filling.

The level of subgrade was recorded prior to fill commencing. The Filling (consisting of Sandy Gravelly Clay/ Sandy Clay won from the site) was placed, compacted and tested under the supervision of FMG Research in accordance with the requirements for Level 1 Supervision set out in AS3798 'Guidelines on Earthworks for Commercial and Residential Developments'.

Field density tests have been carried out with test locations selected randomly, and have reached a minimum compacted density of 95% in accordance with AS1289 5.1.1 (Standard Compaction). The final fill level was recorded.

Certification

The filling placed and compacted within the area [the extent of which is defined by the area hatched in red on Greenhill Drawing No. 20-2458-002 Rev 0 in our opinion can be considered as 'controlled fill' meeting the requirements of AS2870 'Residential Slabs and Footings' for the purpose of footing design. This certification is not applicable for structures that imply loading outside the scope of AS2870.

The certificate applies to fill placed from the recorded subgrade level up to the final fill level as recorded on the plans attached and held at FMG Research. Any filling discovered outside the defined area or to a depth significantly greater than shown on the plan(s) and any topsoil/ landscaping fill placed is not included in this certification.

Retaining wall and fill batter note

Any filling on the high side of a retaining wall within a zone of width equal to the height of the retaining wall shall not be considered controlled fill. Design of footings and structures in this zone needs to be considered by the footing designer considering the fill as uncontrolled.

Any fill within an angle of 30° degrees from the base of a fill batter shall not be considered controlled fill. *Note the actual angle depends on soil type and should be confirmed by the engineer if footings are proposed to be within or adjacent to this zone.

Important notes regarding this certificate

This certification is based on the supervision and testing undertaken during our engagement and at the time of the certification. Any subsequent site works may impact on this certification. FMG Research is an experienced geotechnical inspection and testing authority (GITA) and all due care has been taken

when assessing and defining 'natural' ground. Should conditions encountered on site be markedly different from those anticipated and described in this report then FMG Engineering should be notified immediately.



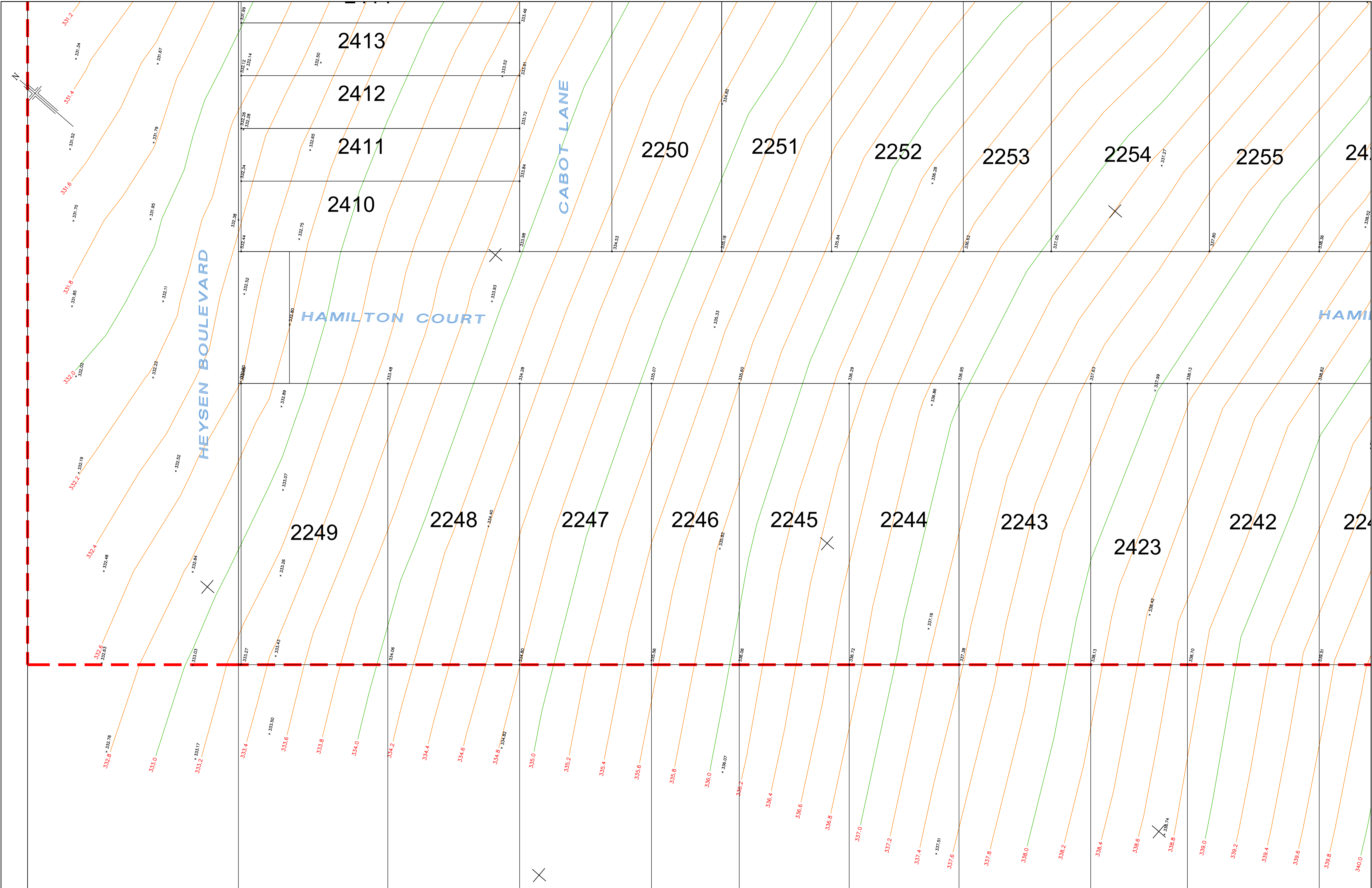
Jeff Zanker

BEng (Civil & Water) (Hons) BAppSc (EnvMgt) GradCertPavtTech CPEng NER,
Senior Civil Engineer, FMG Engineering

Attached:

1. Greenhill Drawing No. 20-2458-002 Rev 0
2. Alexander Symonds Drawing No. 21A0723.C0005 Topsoil Strip Levels Rev 0 Sheet 2 of 4
3. Alexander Symonds Drawing No. 21A0723.C0005 Post Fill Levels Rev 0 Sheet 2 of 4

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| | | | | |
|-------------------------------------|------------|-----------------|------|-------|
| 0 | 22.12.2021 | INITIAL RELEASE | AS | NM |
| REV | DATE | DESCRIPTION | CALC | FIELD |
| ADDITIONS, AMENDMENTS AND APPROVALS | | | | |

| | |
|------------------------------|--------|
| 47.51 NATURAL SURFACE POINTS | LEGEND |
|------------------------------|--------|

| | |
|---|-----------------------|
| COORDINATE SYSTEM | |
| VERTICAL: | AHD |
| HORIZONTAL: | GROUND PLANE ORIENTED |
| | TO: MGA 94 ZONE 54 |
| SCALE: GROUND | (CSF = 1.0000021) |
| ADOPTED STATION & AUTHORITY | |
| PSM 6627/14226 | RL: 350.142 SDB |
| PSM 6627/14226 | E: 307216.149 SDB |
| | N: 6114638.370 SDB |
| SDB denotes SA Government survey data base values (Dated: / / 2015) | |

| | | | | | | | |
|--|---|---|---|----|----|----|---------------------------------------|
| 0 | 2 | 4 | 8 | 12 | 16 | 20 | m |
| 1:200 | | | | | | | ORIGINAL SHEET SIZE A1 |
| NOTES: | | | | | | | GRID INT: 50m |
| Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions. Boundaries have not been verified by field survey. Construction or design on or near boundaries or easements will require additional survey work. | | | | | | | CONTOUR INTERVAL: MAJ:1.0m & MIN:0.2m |
| | | | | | | | SURVEY: NM 23.03.2021 |
| | | | | | | | DRAWN: AS 22.12.2021 |
| | | | | | | | CHECKED: RES 22.12.2021 |

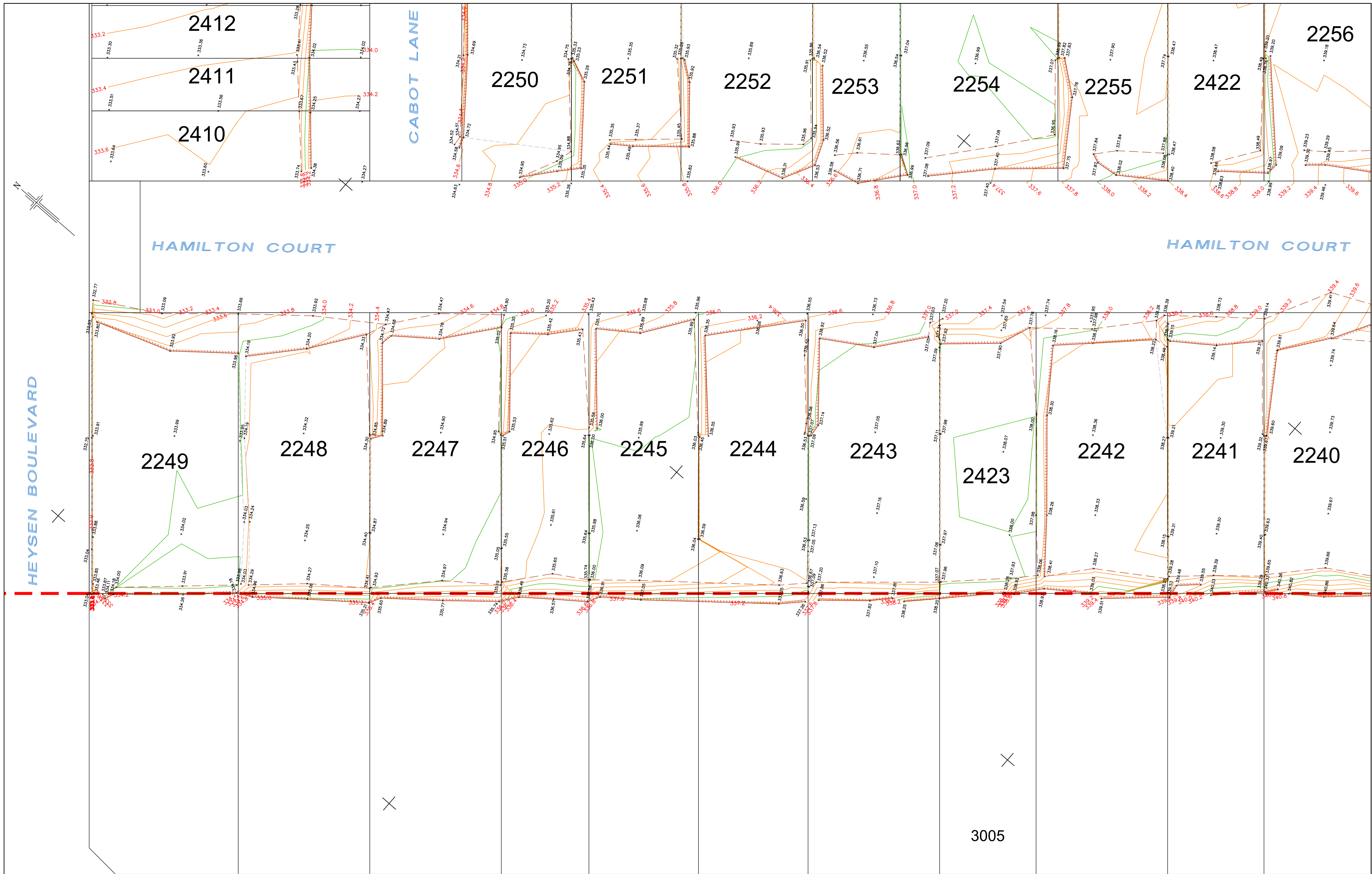
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+ Construction + Mining +
+ Spatial Information Management +

Alexander
Symonds
Surveying
Consultants

| | | | | |
|--|--|-------------|--------------|----------|
| POST TOPSOIL STRIP SURVEY STAGE 5 - BLEFARI MOUNT BARKER | | DRAWING No. | SHEET 2 OF 4 | REVISION |
| 21A0723.C0005 Topsoil Strip Levels Rev 0 | | | | 0 |



| | | | | |
|-------------------------------------|------------|-----------------|------|-------|
| 0 | 20.12.2021 | INITIAL RELEASE | AS | PSW |
| REV | DATE | DESCRIPTION | CALC | FIELD |
| ADDITIONS, AMENDMENTS AND APPROVALS | | | | |

47.51 NATURAL SURFACE POINTS
— BOTTOM OF BANK
— TOP OF BANK
— CHANGE OF GRADE

LEGEND

| COORDINATE SYSTEM | |
|---|--|
| VERTICAL: | AHD |
| HORIZONTAL: | GROUND PLANE ORIENTED TO: MGA 94 ZONE 54 |
| SCALE: GROUND (CSF = 1.0000021) | |
| ADOPTED STATION & AUTHORITY | |
| PSM 6627/14226 | RL: 350.142 SDB |
| PSM 6627/14226 | E: 307216.149 SDB |
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Notes:
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| | |
|-------------------|------------------------|
| 1:200 | ORIGINAL SHEET SIZE A1 |
| GRID INT: | 50m |
| CONTOUR INTERVAL: | MAJ:1.0m & MIN: 0.2m |
| SURVEY: | PSW 17.12.2021 |
| DRAWN: | AS 20.12.2021 |
| CHECKED: | RES 20.12.2021 |

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POST FILL LEVEL SURVEY
STAGE 5 - BLEFARI
MOUNT BARKER

DRAWING No. SHEET 2 OF 4
21A0723.C0005 Post Fill Levels Rev 0

REVISION
0