



Our ref: PS138666-CLM-LTR-001 RevB

Your ref: Marshall Precinct Preliminary Environmental Assessment Update

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Dear ██████████

Marshall Precinct Preliminary Environmental Assessment Update

City of Greater Geelong (CGG) commissioned WSP Australia Pty Ltd (WSP) to undertake a review and update the land contamination risk ranking completed in 2013 by Golder Associates Pty Ltd (Golder)¹, in line with the new legislation and guidelines enacted on 1 July 2021, for the properties located within the Marshall Precinct Structure Plan (MPSP).

The MPSP encompasses predominately agricultural land within the area bound by Marshelltown Road (north), Barwon Heads Road (east), Reserve Road (south) and railway line (south), and some land parcels outside this area, but excludes the already developed residential area to the east. Refer to attached map in Attachment C, excerpt from the Marshall Precinct Structure Plan (CGG, 2023) document.

1.1 Background

It is noted that the 2013 Preliminary Environmental Assessment (Golder, 2013) (PEA) was completed in line with the former Victorian legislation (Environment Protection Act 1970 (EP Act 1970)) and Department of Sustainable and Environment (DSE) General Practice Note on “Potentially Contaminated Land” (DSE, 2005). On 1 July 2021, the EP Act 1970 was superseded by the Environment Protection Act 2017 (EP Act 2017) while the General Practice Note was replaced by the Potentially Contaminated Land – Planning Practice Note 30 (PPN30).

WSP understands that CGG requires a review of previous land contamination advice provided in 2013 to address recent request from Environment Protection Authority (EPA) Victoria with respect to the proposed MPSP.

¹ Golder has since been acquired by WSP

2. Objective

The objective of the review is to address any amendments required to reflect recent changes in planning guidance (Planning Practice Note 30 (PPN30) and Ministerial Direction No.1 (MD No.1)) and potential changes in land use since 2013.

It is noted that the scope of work for this limited assessment does not include a comprehensive site history review and no site walkover was undertaken. This assessment was based on the findings reported in the PEA (Golder, 2013) and updated with observations made from publicly available aerial images.

This assessment is an addendum and should be read in conjunction with the 2013 PEA (Golder, 2013) report completed by Golder.

3. Scope of works

The following scope of works were completed:

- Review of recent EPA communication regarding the MPSP.
- Review of available aerial images to determine if there have been any changes to land use since the 2013 assessment.
- Review of current land use with respect to PPN30 and Ministerial Direction No.1 requirements.
- Provision of this letter report (as an addendum to the 2013 PEA report) detailing whether the land is or is not potentially contaminated, and its categorisation in accordance with the PPN30.

4. Review of report and documents

The following report and relevant documents pertaining to the MPSP were provided to WSP for review with key findings summarised in Section 4.1 below:

- Golder (2013), *Preliminary Environmental Assessment (Contamination and Geotechnical)*. Report Number 137613044-001-R-Rev0. Prepared for City of Greater Geelong, dated 6 December 2013.
- Golder (2020), *Response to EPA Correspondence, Marshall Precinct Structure Plan*. Report Number 20139801-L-Rev0. Prepared for City of Greater Geelong, dated 23 March 2020.
- EPA (2020), *RE: Greater Geelong Planning Scheme Amendment – Armstrong Creek Marshall Precinct Structure Plan*. Dated 5 June 2020.
- EPA (2023), *RE: Greater Geelong C278ggee – Marshall PSP – EPA*. Dated 13 June 2023.
- CGG (2023), *Marshall Precinct Structure Plan*. Dated July 2023.

4.1 Summary of report and documents

4.1.1 Preliminary Environmental Assessment (Golder, 2013)

A multi-disciplinary (environmental and geotechnical) preliminary environmental assessment (PEA) was undertaken in 2013 for the Marshall Precinct to facilitate the urban development within the Armstrong Creek Urban Growth Area (UGP) with the intention of transforming the area into a mixed-use precinct with particular focus on residential use. The following key findings pertaining to the environmental assessment were noted:

- The environmental assessment comprised of a high-level review to identify potential land contamination issues at the site. Potential land contamination, both current and historical, was evaluated based on the data gathered from 'drive by' inspection/observations and desktop review.

- Based on the findings, a land contamination risk ranking to assess the likelihood and significance of the remediation required to achieve identified land uses (i) Low Density Residential/School/Kindergarten, (ii) High Density Residential (iii) Recreational and (iv) Commercial/industrial was developed. The degree of potential land contamination was divided into four broad and subjective contamination risk categories (Low, Low to Medium, Medium, High).
- The Site was predominately used for residential and farming purposes, with some isolated industrial activities. For the purpose of the assessment, the Marshall Precinct project area was subdivided into four (4) sub-areas:
 - **Farming Area** (northern portion): approximately 79 hectares (ha), located in the suburb of Charlemont and Marshall and generally occupied by agricultural land and associated residential properties and vacant land.
 - Zonings under the CGG Planning Scheme included Farming Zone (FZ) and Public Use Zone Service and Utility (PUZ1). Planning overlays included Environmental Significance Overlay: Schedule 2 (ESO2), Flooding Overlay (FO) and Vegetation Protection Overlay (VPO1).
 - **Marshalltown Road** (central portion but excludes the residential area adjacent south of Barwon Heads Road): approximately 18 ha, located in the suburb of Charlemont and generally occupied by agricultural land and associated residential properties and vacant land.
 - Zoned Urban Growth Zone (UGZ) under the CGG. Planning overlays included FO, VPO1 and Public Acquisition Overlay: Schedule 2 (PAO3).
 - **Barwon Heads Road South** (south-eastern portion): approximately 32 ha, located in the suburb of Marshall and generally occupied by residential properties, vacant land and quasi-agricultural or ‘hobby farm’.
 - Zonings under the CGG Planning Scheme included Urban Growth Zone (UGZ) and Road Zone Category 1 (RDZ1). Planning overlay included Land Subject to Inundation Overlay (LSIO).
 - **Drews Road** (south-western portion): approximately 65 ha, located in the suburb of Marshall and generally occupied by residential properties, vacant land and quasi-agricultural or ‘hobby farm’.
 - Zonings under the CGG Planning Scheme included FZ, PUZ1 and Public Use Zone Transport (PUZ4). Planning overlay included Environmental Significant Overlay: Schedule 1 (ESO1).
- The MPSP project area was historically used for agricultural and residential purposes since at least 1830s. Increased in development was observed after the 1980s and generally comprised of smaller structures (including residential) and division of land. Past and present development within the project area included:
 - Agricultural industries including but not limited to livestock such as beef cattle, sheep, horses and chickens. Limited knowledge of cropping activities was identified.
 - Various public infrastructure and facilities including parklands and reserves, railway reserves and roads.
 - Various industrial and commercial uses including natural fertiliser production.
 - Combined residential and agricultural use, colloquially known as hobby farms.
 - Residential use with ‘hobby’ farms.

- Pockets of vacant land also exist across the MPSP area.

Similar to the MPSP area, a section of land adjacent to the MPSP area was developed for residential purposes since the 1980s. Residential development of the area surrounding the MPSP area has continued to the present day.

Conclusion

- The contamination ranking for each land parcel was taken in accordance with the Department of Sustainability and Environment (DSE) General Practice Note – *Potentially Contaminated Land* (DSE, 2005). The majority of land was assigned a low or low to medium contamination ranking. The low-medium ranking activities were driven by either the land use identified or by filling activities on land.
- Low contamination ranking due to the undeveloped nature of the use comprising of predominantly residential and low intensity grazing land.
- Medium risk activity areas requiring further investigation under the DSE Practice Note were identified at the MPSP area. However, it was possible that local medium risk activities exist within particular land parcels, these activities do not necessarily result in a medium contamination ranking.
- High risk activities that would trigger a statutory environmental audit were not identified within the MPSP area. It was considered possible that high risk activities do exist within the land parcels, however, the absence/presence of these activity uses, cannot be ascertained without site specific environmental assessment.

Recommendations

- As part of the precinct planning works, it was recommended that applicants carry out further assessment to confirm the presence/absence of the following activities:
 - Former and present USTs (high ranking);
 - Areas used for disposal of household waste, solid waste and potentially asbestos (medium ranking);
 - Areas used for the disposal of animal carcasses (medium ranking);
 - Areas filled with soil sourced from off-site (medium ranking).
- As part of the development process, CGG should consider requesting further preliminary environmental assessment as a condition of the planning permit process.
- Further assessment should be undertaken by a suitably qualified environmental consultant who is a member of the Australian Contaminated Land Consultant Association (ACLCA).
- As a minimum, the preliminary environmental assessment should include a desktop review (site history, surrounding land use, review of previous report(s)), limited intrusive soil sampling based on size of land parcel and contamination ranking, appraisal of the data against the NEPM 2013 guidelines, and recommendations for further investigation/remediation (if required).
- A construction management plan (CMP) was recommended as a planning condition to manage the removal of above contamination features/waste if it was identified to be present or possible present on-site.

4.1.2 Letter: *Response to EPA Correspondence, Marshall Precinct Structure Plan (Golder, 2020)*

A letter, dated 23 March 2020, was prepared for CGG in response to EPA review and comments regarding the 2013 PEA report. The objective of this letter was to assist CGG in assessing and responding to recent correspondence from EPA regarding the MPSP.

Overall, it was considered by Golder that the 2013 assessment work undertaken by Golder was adequate and provided information outlined by EPA, and therefore further historical review was not required to facilitate the MPSP.

4.1.3 Letter: *RE: Greater Geelong Planning Scheme Amendment – Armstrong Creek Marshall Precinct Structure Plan (EPA, 2020)*

Subsequent to the Golder letter dated 23 March 2020, EPA undertook a second review of the 2013 Assessment report, including the appendices which were not previously provided to EPA (and therefore was not reviewed).

Based on the second review, the following further assessment and advice was provided by EPA:

- The 2013 PEA did not contain sufficient detail to be considered a Preliminary Site Investigation to the standard established in B2 of the National Environment Protection (*Assessment of Site Contamination*) Measure (NEPM). The assessment was completed in 2013 and does not consider potentially contaminating activities that have occurred or been intensified since then.
- The assessment was undertaken in 2013 and therefore referenced the General Practice Note – Potentially Contaminated Land. The assessment of risk is not consistent with the application of PPN30.

The EPA letter concluded the following:

Whilst the risk of contamination is generally deemed to be low, the Environmental Assessment concludes that Council should consider requiring applicants to undertake Preliminary Site Assessments on a site by site basis to further understand risk of contamination.

EPA have reviewed the Environmental Assessment and the Golder Letter and consider the advice to undertake further environmental assessment to be reasonable.

EPA consider that this environmental assessment should take the form of a Preliminary Site Investigation to the standard established under the National Environmental Protection (Assessment of Site Contamination) Measure 1999, as amended 2013. If the site history is incomplete and contaminating activities are suspected to have occurred, it may be necessary to undertake a limited preliminary sampling and analysis program to determine whether further assessment is required.

4.1.4 Email: *RE: Greater Geelong C278ggee – Marshall PSP – EPA (EPA, 2023)*

In an email from EPA dated 13 June 2023, EPA noted that the 2013 PEA was completed prior to the updated framework for the management of potentially contaminated land (PCL) (PPN30 and MD No.1) and would not have considered or included the consequential changes made as a result of the updates. EPA therefore recommended the following:

- Update PEA in line with PPN30 and MD1 and determine whether land is or isn't potentially contaminated. If the land is determined to be contaminated, this will either be a medium or high

potential for contamination. Recommendations for further investigation should be in accordance with PPN30.

- Or alternatively refer to the guidance provided in PPN30 on how to determine whether land is potentially contaminated or not. This may include the preparation of a Site History Review (SHR). If the outcome of the SHR is that the land does not meet the definition of PCL then no further assessment is required. Conversely if the land does meet the definition of PCL, then PPN30 sets out the recommended level of assessment where the land has a medium or high risk of potential contamination.

4.1.5 Marshall Precinct Structure Plan (CGG, 2023)

A draft Marshall Precinct Structure Plan (CGG, 2023) was provided to WSP for review.

Based on the Future Urban Structure plan shown on page 24 of the MPSP, the Marshall Precinct area has been revised and will now only include the Marshall Town Road, Drews Road and Barwon Heads Road sub-study area. The sub-area within the Farming Zone, northern portion of the initial development area, has now been removed and no longer forms part of the MPSP project area. It is also noted that three new land parcels have also been added to the MPSP and includes the land parcels identified as 86-100 and 110 Reserve Road, Charlemont, and the nature strip and driveway located at the corner of Barwon Heads Road and Tamala Avenue.

Drews Road and Barwon Heads sub-areas are proposed for mixed use, primarily for residential (med/high density) land use. Marshall Town Road sub-area is proposed for commercial/bulky goods and drainage reserve land use.

As the MPSP has been revised and no longer includes the Framing Zone sub-area, CGG has requested WSP to ‘grey out’ the data for this subarea.

5. Technical Framework

5.1 Environmental Protection Act 2017

The Environment Protection Act 2017 (EP Act) was enacted on 1 July 2021 and changed Victoria’s focus for environment protection and human health to a prevention-based approach, underpinned by the general environmental duty (GED). The GED requires everyone, including businesses and individuals, conducting activities that pose a risk to human health or the environment from pollution or waste, to understand those risks and take reasonably practicable steps to eliminate or minimise them.

5.1.1 Contaminated Land Duties

With respect to contamination, the EP Act includes special provisions within Regulations 8 to 15 which specifically concern the new duty to notify (DtN) of contaminated land, and the duty to manage (DtM) contaminated land. Notably, the new contaminated land duties apply to “*land under the management or control of a person*” and establishing which parties are in management or control of a site is a key step in apportioning these responsibilities.

Noting that majority of the land parcels within the Marshall Precinct are under private ownership and management, which mainly comprises agricultural and residential land use with some various commercial/industrial uses, CGG as the local council would not generally be considered to be ‘in management or control’ of the precinct. However, to inform the precinct planning process, it is important to understand the contamination status of the precinct, to assist CGG and key stakeholders to understand whether any environmental liabilities apply to the precinct under the new legislation.

The key contaminated land duties that are pertinent to the precinct during the planning phase are as follows:

- **Duty to Notify:** The duty of persons in management or control of land to notify EPA as soon as practicable if the contamination may pose a significant risk to human health or the environment.
- **Duty to Manage:** The duty of persons in management or control of land to minimise the risks of harm to human health and the environment from confirmed contamination.

While acknowledging that CGG is unlikely to be in management or control of any property within the precinct, it is also recognised that CGG may have a duty to inform any private property owners (stakeholders) about their obligations, if significant potential or known contamination sources are identified through the course of the assessment of contamination risk.

5.1.2 Environmental Audit System

One possible outcome of the assessment of potential for contamination may be the requirement for undertaking further environmental work such as a Preliminary Risk Screen Assessment (PRSA) and / or a statutory Environmental Audit within the restructured audit system.

- **PRSA:** The PRSA is expected by EPA Victoria to be applied predominantly in the context of a planning approvals process and provisions including cl 45.03 (the Environmental Audit Overlay), cl 13.04-1S (contaminated and potentially contaminated land), and Ministerial Direction No.1. A PRSA may only be conducted by an EPA appointed Environmental Auditor. The PRSA process is expected to mimic that of a Preliminary Site Investigation (PSI) outlined in the National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended) (NEPM [ASC], 1999). In accordance with EPA Victoria Publication 2021: Guidelines for Conducting Preliminary Risk Screen Assessments (EPA, 2022), a PRSA is a screening assessment used to assess the likelihood of the presence of contaminated land (which includes consideration of whether a risk of harm is likely to be present) and to determine if an Environmental Audit is required. **Therefore, if there is a likelihood that contaminated land is present within the MPSP area for the use or proposed use, including consideration of an adjacent land use, the Environmental Auditor may recommend that an Environmental Audit is conducted, and if an Environmental Audit is recommended, the Environmental Auditor will need to determine the scope for that Audit.**
- **Environmental Audit:** When undertaking an environmental audit to assess the suitability of land for a proposed use, the Environmental Auditor assesses the nature and extent of the risk of harm to human health or the environment from contaminated land. This includes recommendations to manage the risk of harm, and recommendations to manage the contaminated land.

Further discussion of how the PRSA and environmental audit may relate to the precinct in the context of the planning system is provided in Section 5.2 below.

5.2 Contamination & Planning System

With the introduction of the EP Act in 2021, existing guidance regarding the relationship of potential contamination and the planning system has required revision to account for the new legislation.

5.2.1 Ministerial Direction No.1 (MD No.1)

Ministerial Direction No.1 was issued by the Minister for Planning on 27 August 2022 and seeks to ensure that potentially contaminated land is suitable for a sensitive use proposed to be allowed under a planning scheme amendment. A sensitive use includes (even if ancillary to other uses) residential use, childcare centre, kindergarten, pre-school centre and primary school. Ministerial Direction No.1 also includes provision for the same controls to be applied to children's playground and secondary school uses in the same manner as a sensitive use.

In summary, the Direction sets out the pathway for the planning authority to satisfy itself that land is or is not potentially contaminated, and if it is determined that the land (or part of the land) is potentially contaminated, that the planning authority can undertake to require a PRSA, an Environmental Audit, or implement an Environmental Audit Overlay to ensure that the land is suitable for a proposed sensitive use.

5.2.2 Planning Practice Note 30 (PPN30)

With the introduction of the Environment Protection Act 2017 (EP Act) in 2021, the previous guidance regarding the relationship of potential contamination and the planning system required revision to account for the new legislation. Planning Practice Note 30 (PPN30) was published in July 2021 and provides updated guidance regarding the role of the planning system in helping to assess the potential for contamination at a site, and advice concerning the level of environmental assessment work that may be required.

A planning or responsible authority must ensure that the effects of the environment on a planning proposal are considered, and that potential contaminated land is suitable for its proposed use. PPN30 provides a recommended approach to assessing potentially contaminated land as presented in Table 5.1, with the MPSP scenario may be compared against, as follows:

Table 5.1 PPN30 (2021) recommended approach to assessing potentially contaminated land

Planning Proposal		Potential for Contamination	
		High	Medium
Proposed uses defined in Ministerial Direction No. 1, the EAO, and clause 13.04-1S			
<ul style="list-style-type: none"> — Sensitive uses: — Residential use — Childcare centre — Kindergarten — Pre-school — Primary school — Children’s playground — Secondary school 	New use or buildings and works associated with a new use	A	B
	Buildings and works associated with an existing use	B	B
Proposed other land use			
<ul style="list-style-type: none"> — Open space — Agriculture — Retail or office — Industry or warehouse 	New use, or buildings and works associated with a new or existing use	C	D

Planning Scheme Amendments		Planning Permit Application
A	PRSA or audit applies Proceeding directly to an audit is recommended.	PRSA or audit option applies Proceeding directly to an audit is recommended

Planning Scheme Amendments		Planning Permit Application
B	PRSA or audit option applies PRSA to determine need for audit is recommended.	PRSA or audit option applies PRSA to determine need for audit is recommended.
C	PSI to inform need for audit is recommended	PSI to inform need for audit is recommended
D	Planning authority to document consideration of potential for contamination to impact proposal	Responsible authority to document consideration of potential for contamination to impact proposal

Note: Where multiple uses are proposed, the most sensitive land use should be considered to inform the approach to determining whether an Environmental Audit may be required.

5.2.3 Application to the Marshall Precinct Structure Plan

The potential for contamination within the context of PPN30 is related to previous and existing land uses. Land uses with potential to contaminate land are presented in Table 2 of PPN30, separated into High and Medium categories, though it is noted that this not an exhaustive list.

Within the context of the MPSP, there is potential for a range of previous and current land uses to influence the potential for contamination, as described in PPN30, Table 2:

- Agricultural and animal production (medium potential), however the guidance goes on to state that while most agricultural land is not likely to be contaminated i.e., a low potential, the potential for specific contaminating activities to have occurred over time should be considered i.e., commercial use of pesticides, biosolids application to land, farm waste disposal, and “high potential” activities (see below).
- Ancillary use or activities (medium potential): e.g., above ground storage of chemicals or fuels, waste disposal or dumping, stockpiles of imported fill.
- High potential activities associated with agriculture and some commercial/industrial uses, including:
 - Fertiliser manufacturer or storage (off-site)
 - Service Stations/fuel storage
 - Automotive repair/engine works/car wrecker
 - Mass animal burial
 - Stock dipping sites
- Adjacent contaminating activities (medium potential): industrial uses at adjoining land where on-site contamination may have migrated across land boundaries, such as in groundwater, via surface discharges and air emissions.

WSP notes that for the MPSP, and considering the above recommendations in PPN30, for a proposed mixed use with particular focus on residential use (low – stated as conventional residential in the PSP documentation, medium and high density) precinct end use that involves a new use or buildings, a preliminary site investigation (PSI) to determine the need for an environmental audit is recommended. PPN30 provides further guidance regarding how the PRSA and environmental interact, as follows:

- The role of a PRSA is to determine the need for an environmental audit. The decision whether to undertake a PRSA or proceed directly to audit will depend on the potential for contamination and the proposal.
- A PRSA is recommended for scenarios where it is uncertain whether an audit is warranted, specifically those with lower risk of contamination i.e., medium potential in Table 5.1.
- If a PRSA process has been undertaken, the PRSA statement may either conclude that (1) no environmental audit is needed or (2) may conclude that an environmental audit is warranted to determine site suitability.

PPN30 states that if a PSI has been undertaken, the findings can inform the planning or responsible authority in deciding whether an environmental audit, or alternative assessment or management measures, are appropriate, or in concluding that no further action is needed. In this case, WSP believes that an effective PSI can drive a project towards the PRSA assessment pathway (rather than an environmental audit), as is preferable for the MPSP area.

5.2.4 Contamination Risk Scheme

Due to the potential for contamination being associated with agricultural land and animal production land uses is less defined in PPN30, WSP has considered this risk further within the context of the MPSP. We considered that while the wider area of the MPSP is not likely to be contaminated (low risk), there may be certain areas where more concentrated activities have occurred e.g., farmyard, farm buildings and possible residences (medium risk) and some commercial/industrial activities including bulk storage of fuel (service station), automotive works, car wrecker, natural fertiliser manufacturer (off-site) and properties storing and using hazardous chemicals (high risk). By contrast, there may be also areas such as native forest or bushland that be considered ‘untouched’ and unlikely to be associated with contamination (very low risk).

Based on these considerations, the recommended approach to assessing potentially contaminated land provided in PPN30 has been aligned to the following:

- **Risk Level:** High risk, Medium risk, Low risk or Very low risk designations for contamination being present.
- **Potential for Contamination:** Scenarios where contamination may be manifested for agricultural land uses.
- **Example Land Uses:** Range of potentially contaminative agricultural activities, relevant to risk levels.
- **Contaminants of Concern:** Range of contaminant types or categories generally associated with activities.

The resultant contamination risk scheme, as presented in Table 5.2 below, has been used throughout this assessment:

Table 5.2 Risk Scheme and PPN30 Context

RISK LEVEL	Potential for contamination	PPN30 CONTEXT	EXAMPLE LAND USES	CONTAMINANTS OF CONCERN
High risk	High risk of significant contamination being present; situation more likely relevant to point sources within assessment area.	Scenario A: Proceeding directly to an audit is recommended	<ul style="list-style-type: none"> — Service station — Automotive workshop — Fertiliser manufacturer — Car wrecker — Commercial/industrial operations ass — Farmyards and farm buildings with bulk fuel or chemical storage e.g., USTs. — Slurry pits, slurry lagoons or cess pits with animal wastes (excreta). — Agricultural landfills, possibly including animal burial after culling. — Sheep treatment areas (sheep dips). 	Comprising contamination point sources from fuels (bulk storage), metals, solvents, acids/alkalis, refrigerant, antifreeze, oils, inorganics, calcium phosphate, calcium sulfate, nitrates, ammonia sulfate, carbonates, potassium, pesticides, fertilisers, herbicides (bulk storage and extractive uses); faecal coliforms, hazardous gases (slurry pits); biohazards (landfills), arsenic and dieldrin (sheep dips).
Medium risk	Medium risk of significant contamination being present; situation more likely relevant to localised diffuse sources across assessment area.	Scenario B: PRSA to determine need for audit is recommended.	<ul style="list-style-type: none"> — More intensive farming such as market gardening, horticulture or cropping. — Applications of biosolids as fertiliser e.g., vineyards, pasture, arable land. — Stockpiles of soil, rubble, other wastes, laydown areas for old farm machinery and various construction works. — Ancillary land uses in agricultural areas e.g., builders' yards, site office and laydown yard for the Barwon Heads Road Upgrade project, vehicle mechanics. 	May include diffuse but more localised impacts from the application of fertilisers, pesticides or herbicides, possibly small quantities of fuels, oils, paints, solvents, metals or ACM from yards.
Low risk	Low risk of significant contamination being present; situation more likely relevant to regional dispersed sources across assessment area.	Scenario C: PSI to inform need for audit is recommended.	<ul style="list-style-type: none"> — Expanses of agricultural fields used for livestock grazing. — Areas unlikely to have required use of fertilisers, pesticides or herbicides. — Farmhouses and low-density rural residences, possibly with septic tanks. — Horse facilities, running tracks, paddocks and stables. 	Likely limited to dispersed regional contaminants in groundwater or surface water e.g., faecal coliforms from residential septic tanks, or nitrates and nitrites from application of fertilisers.
Very low risk	Negligible risk of significant contamination being present; situation more likely relevant to absence of sources across assessment area.	Scenario D: Planning authority to consider any potential for contamination	<ul style="list-style-type: none"> — Land unaffected by European settlement in Victoria i.e., pre-European conditions. — Native forests or bushland subject to low-impact management measures. 	Only naturally occurring contaminants associated with ambient local conditions and excluding impacts from controlled burns and possibly the use of firefighting foams containing PFAS.

6. Summary of Aerial Review

A review of available aerial images dated between September 2013 and June 2023 (sourced from NearMap) was completed for each land parcel within the MPSP area to determine if there have been any changes to land use and assess if these changes and associated activities have the potential to cause contamination.

In the 2013 PEA (Golder, 2013), the properties within the precinct were reported to be predominately residential and low intensity grazing land with some various commercial/industrial uses. Since the 2013 assessment work, based on review of available aerial images, some development/redevelopment, demolition and improvements have occurred, however for most part, the majority of the land parcels within the precinct have remained relatively unchanged and predominately used for residential and agricultural purposes (grazing, hobby farm). Notable changes include the development of the service station and the Barwon Heads Road Upgrade.

Past and present land use within the MPSP area includes:

- Agricultural industries including but not limiting to livestock (beef cattle, sheep, horses and chickens). No cropping was observed in the aerial review and limited knowledge of cropping activities was identified in the 2013 assessment.
- Various public infrastructure and facilities including parklands and reserves, railway reserves and roads. As part of the Barwon Head Road upgrade, undertaken between 2021 and 2023 within the MPSP area, the western portion of some properties were acquired by the state government for the purposes of widening Barwon Heads Road.
- Various industrial and commercial uses including, service station, car wrecker, caravan storage facility, automotive workshops, and nursery.
- Residential use with ‘hobby farm’.
- Pockets of vacant land, some observed with race tracks likely for motocross racing.
- Natural fertiliser manufacturer located off site to the north.

A summary of known historical and current land uses and activities is presented in Table B.1, Attachment B.

A copy of aerial images between September 2013 and June 2023 is presented in Table A.1, Attachment A.

6.1 Precinct Contamination Risks

6.1.1 PPN30 Considerations

A summary of known former and current uses and activities and associated risk rating, in line with the PPN30, for each land parcel within the MPSP area is provided in Table B.1, Attachment B.

On the basis of the risk assessment, the following register of planning considerations may be provided for the proposed end land use within the MPSP area:

Sensitive Land Use including residential (low, medium/high density) and children’s playground:

- Land parcel identified as “**High**” potential for contamination following the PPN30-based contamination potential assessment will require a PRSA or Environmental Audit to be completed in accordance with requirements of PPN30 and EPA Publication 2021, however proceeding directly to audit is recommended.
- Land parcel identified as “**Medium**” potential for contamination following the PPN30-based contamination potential assessment will require a PRSA or an Environmental Audit to be completed in accordance with the requirements of PPN30 and EPA Publication 2021, however a PRSA to determine need for an Environmental Audit is recommended.

- Land parcel identified as “**Low**” potential for contamination, PPN30 does not include any recommendations for further assessment. In this case, the General Environmental Duty (GED) applies for any suspected risk to human health or the environment.

Other Land Use including commercial/bulk goods, utilities, open space and conservation reserves:

- Land parcels identified as “**High**” potential for contamination following the PPN30-based contamination potential assessment will require a PSI to be completed to determine whether an Environmental Audit is required.
- Land parcels identified as “**Medium**” potential for contamination following the PPN30-based contamination potential assessment will require the planning authority to document consideration of potential for contamination to impact proposal.
- Land parcel identified as “**Low**” potential for contamination, PPN30 does not include any recommendations for further assessment. In this case, the General Environmental Duty (GED) applies for any suspected risk to human health or the environment.

It is noted that for some land parcels identified as “High” or “Medium” potential for contamination were due to a small portion within a wider area that were observed with either ancillary land uses or activities in agricultural areas e.g., laydown yard, automotive work, nursery, storage of imported fill and/or inert waste. These identified areas warrant separation when considering further assessment work.

7. Conclusion and recommendations

WSP was engaged by CGG to undertake a review and update the land contamination risk ranking completed in 2013 by Golder, in line with the new legislation and guidelines enacted on 1 July 2021, for the properties located within the MPSP.

WSP understands that CGG requires a review of previous land contamination advice provided in 2013 to address recent request from Environment Protection Authority (EPA) Victoria with respect to the proposed MPSP.

The objective of the review is to address any amendments required to reflect recent changes in planning guidance (Planning Practice Note 30 (PPN30) and Ministerial Direction No.1 (MD No.1)) and potential changes in land use since 2013. The following key findings were noted:

- In the 2013 PEA (Golder, 2013), the MPSP was divided into four sub-areas comprising of Farming Zone (northern portion), Marshall Town Road (central portion), Barwon Heads Road (south-eastern portion) and Drews Road (south and south-western portion). Based on the revised MPSP (CGG, 2023), the MPSP will now only comprise of the Marshall Town Road, Drews Road and Barwon Heads Road sub-area. The northern portion forming the Framing Zone sub-area has been removed from the revised MPSP.
- Drews Road and Barwon Heads Road sub-areas are proposed for mixed use, primarily for residential land use (mostly med/high density residential in the Drews Road sub-area and mostly ‘conventional’ residential in the Barwon Heads Road sub-area). Marshall Town Road sub-area is mostly proposed for commercial/bulky goods land use.
- In the 2013 PEA (Golder, 2013), the properties within the precinct were reported to be predominately residential and low intensity grazing land with some various commercial/industrial uses. Since the 2013 assessment work, based on review of available aerial images, some development/redevelopment, demolition and improvements have occurred, however for most part, the majority of the land parcels within the precinct have remained relatively unchanged and predominately used for residential and agricultural purposes (grazing, hobby farm). Notable changes include the development of the service station and the Barwon Heads Road Upgrade.



- “High” potential for contamination was identified within the MPSP by the land parcels occupied by a service station or the use / storage of hazardous chemicals.
- The land parcels within the MPSP were predominantly used for agricultural uses (low intensity) (low risk), however due to ancillary uses and activities (e.g., automotive workshop, laydown yard, nursery, storage and/or use of imported fill, storage of inert waste etc) or located adjacent to high risk properties/operations (e.g., service station), these land parcels have been determined to be “Medium” potential for contamination following the PPN30-based contamination potential assessment.
- On the basis of the risk assessment, the following register of planning considerations may be provided for the proposed land use within the MPSP area:
 - Sensitive Land Use (residential and children’s playground):
 - Land parcels identified as “High” or “Medium” potential for contamination following the PPN30-based contamination potential assessment will require a PRSA or an Environmental Audit to be completed in accordance with the requirements of PPN30 and EPA Publication 2021. Proceeding directly to an Environmental Audit is recommended for land parcels identified as “High” potential for contamination.
 - Other Land Use (commercial/bulk goods, utilities, open space and conservation reserves)
 - Land parcels identified as “High” potential for contamination following the PPN30-based contamination potential assessment will require a PSI to be completed to determine whether an Environmental Audit is required.
 - Land parcels identified as “Medium” potential for contamination following the PPN30-based contamination potential assessment will require the planning authority to document consideration of potential for contamination to impact proposal.
 - Land parcel identified as “Low” potential for contamination, PPN30 does not include any recommendations for further assessment. In the context of Ministerial Direction No.1, these sites are considered to be “not potentially contaminated”, however we note that does not mean that these sites are free of all contamination, and as such the General Environmental Duty (GED) applies for any suspected risk to human health or the environment.

To meet the requirements of Ministerial Direction No.1, further site assessment is required where the potential for contamination has been assessed as “High” or “Medium”.

In order to meet requirements of PPN30 and Ministerial Direction No.1, CGG could require the PRSA and/or Environmental Audit requirements prior to the amendment, or defer the PRSA and/or Environmental Audit requirements until after the amendment via the application of an Environmental Audit Overlay (EAO) or inclusion of a requirement for a PRSA within the schedule of the new land zoning.

Yours sincerely


Senior Environmental Scientist


Principal Engineer, Remediation



Encl: NearMap Aerial Images (September 2013 to June 2023)
Summary of Historical and Current Contamination Information
Proposed Marshall Precinct Structure Plan

8. Reference

- CGG (2023), Marshall Precinct Structure Plan. Dated July 2023
- DELWP (2021), Planning Practice Note 30: Potentially Contaminated Land (PPN30), issued by the Department of Environment, Land, Water and Planning, August 2021
- EPA (2020), *RE: Greater Geelong Planning Scheme Amendment – Armstrong Creek Marshall Precinct Structure Plan*. Dated 5 June 2020
- EPA (2023), RE: Greater Geelong C278ggee – Marshall PSP – EPA. Dated 13 June 2023.
- Golder (2013), *Preliminary Environmental Assessment (Contamination and Geotechnical)*. Report Number 137613044-001-R-Rev0. Prepared for City of Greater Geelong, dated 6 December 2013
- Golder (2020), *Response to EPA Correspondence, Marshall Precinct Structure Plan*. Report Number 20139801-L-Rev0. Prepared for City of Greater Geelong, dated 23 March 2020
- Government of Victoria (2017), Environment Protection Act 2017 (EP Act)
- Government of Victoria (2021), Environment Protection Regulations 2021, Statutory Rules 2021 S.R. No. 47/2021, dated May 2021
- Minister for Planning (2021), Ministerial Direction No.1, issued under Planning and Environment Act 1987, issued by the Minister for Planning on 27 August 2021



9. Limitation

This Report is provided by WSP Australia Pty Limited (WSP) for the City of Greater Geelong (CGG) (Client) in response to specific instructions from the Client and in accordance with WSP's communicated scope of works dated 18 July 2023 and agreement with the Client dated 31 July 2023 (Agreement).

9.1 Permitted Purpose

This Report is provided by WSP for the purpose described in the Agreement and no responsibility is accepted by WSP for the use of the Report in whole or in part, for any other purpose (Permitted Purpose).

9.2 Qualifications and Assumptions

The services undertaken by WSP in preparing this Report were limited to those specifically detailed in the Report and are subject to the scope, qualifications, assumptions and limitations set out in the Report or otherwise communicated to the Client.

Except as otherwise stated in the Report and to the extent that statements, opinions, facts, conclusion and / or recommendations in the Report (Conclusions) are based in whole or in part on information provided by the Client and other parties identified in the report (Information), those Conclusions are based on assumptions by WSP of the reliability, adequacy, accuracy and completeness of the Information and have not been verified. WSP accepts no responsibility for the Information.

The Conclusions are reflective of the current Site conditions and cannot be regarded as absolute without further extensive intrusive investigations, outside the scope of the services set out in the Agreement and are indicative of the environmental condition of the Site at the time of preparing the Report. As a general principle, vertical and horizontal soil or groundwater conditions are not uniform. No monitoring, common or intrusive testing or sampling technique can eliminate the possibility that monitoring or testing results or samples taken, are not totally representative of soil and / or groundwater conditions encountered at the Site. It should also be recognised that Site conditions, including subsurface conditions can change with time due to the presence and concentration of contaminants, changing natural forces and man-made influences.

Within the limitations imposed by the scope of the services undertaken by WSP, the monitoring, testing (intrusive or otherwise), sampling for the preparation of this Report has been undertaken and performed in a professional manner in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

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WSP at the time of preparing the Report. The passage of time; unexpected variations in ground conditions; manifestations of latent conditions; or the impact of future events (including (without limitation) changes in policy, legislation, guidelines, scientific knowledge; and changes in interpretation of policy by statutory authorities); may require further investigation or subsequent re-evaluation of the Conclusions.

This Report can only be relied upon for the Permitted Purpose and may not be relied upon for any other purpose. The Report does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise. It is the responsibility of the Client to accept (if the Client so chooses) the Conclusions and implement any recommendations in an appropriate, suitable and timely manner.


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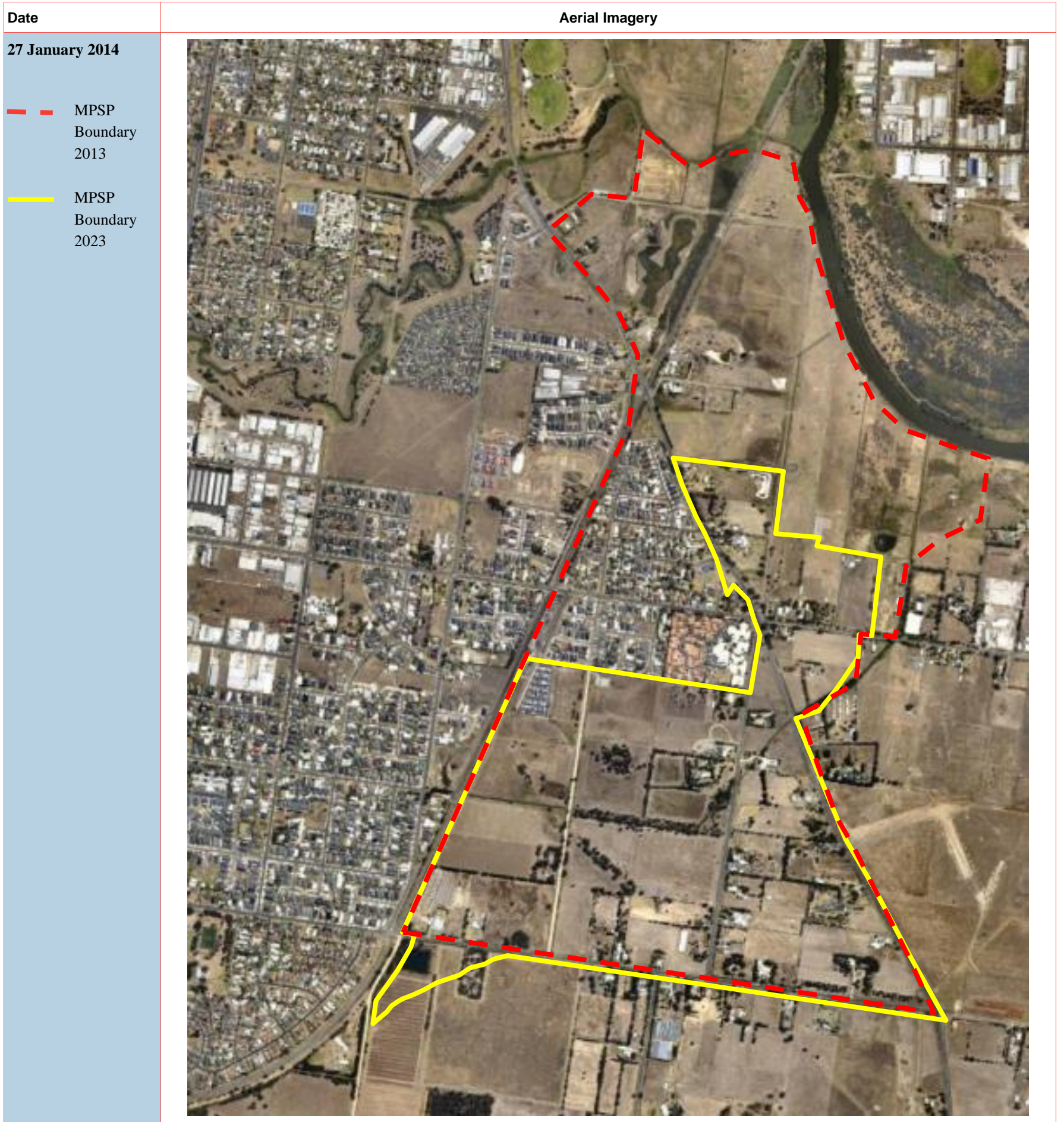
9.4 Disclaimer

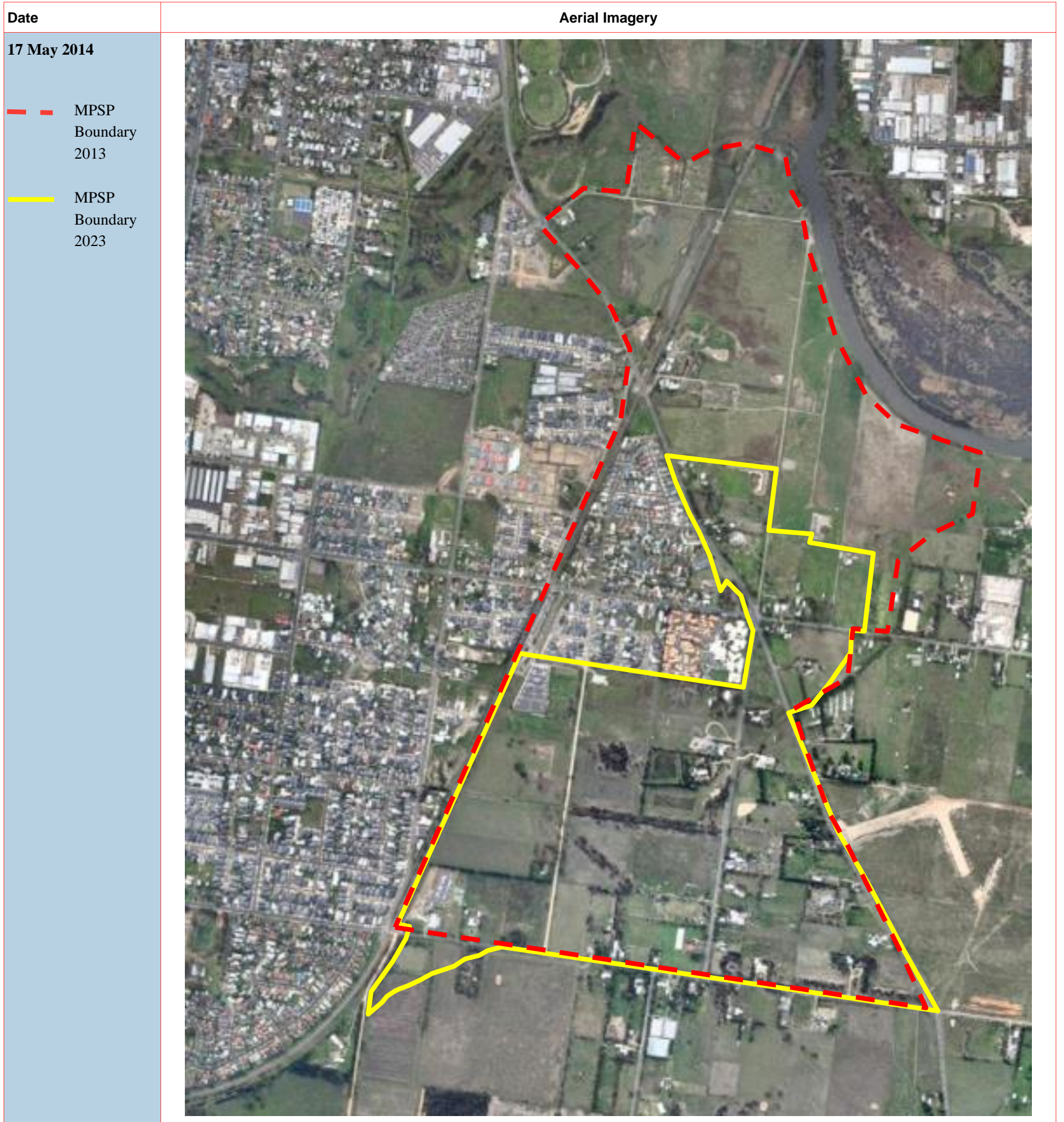
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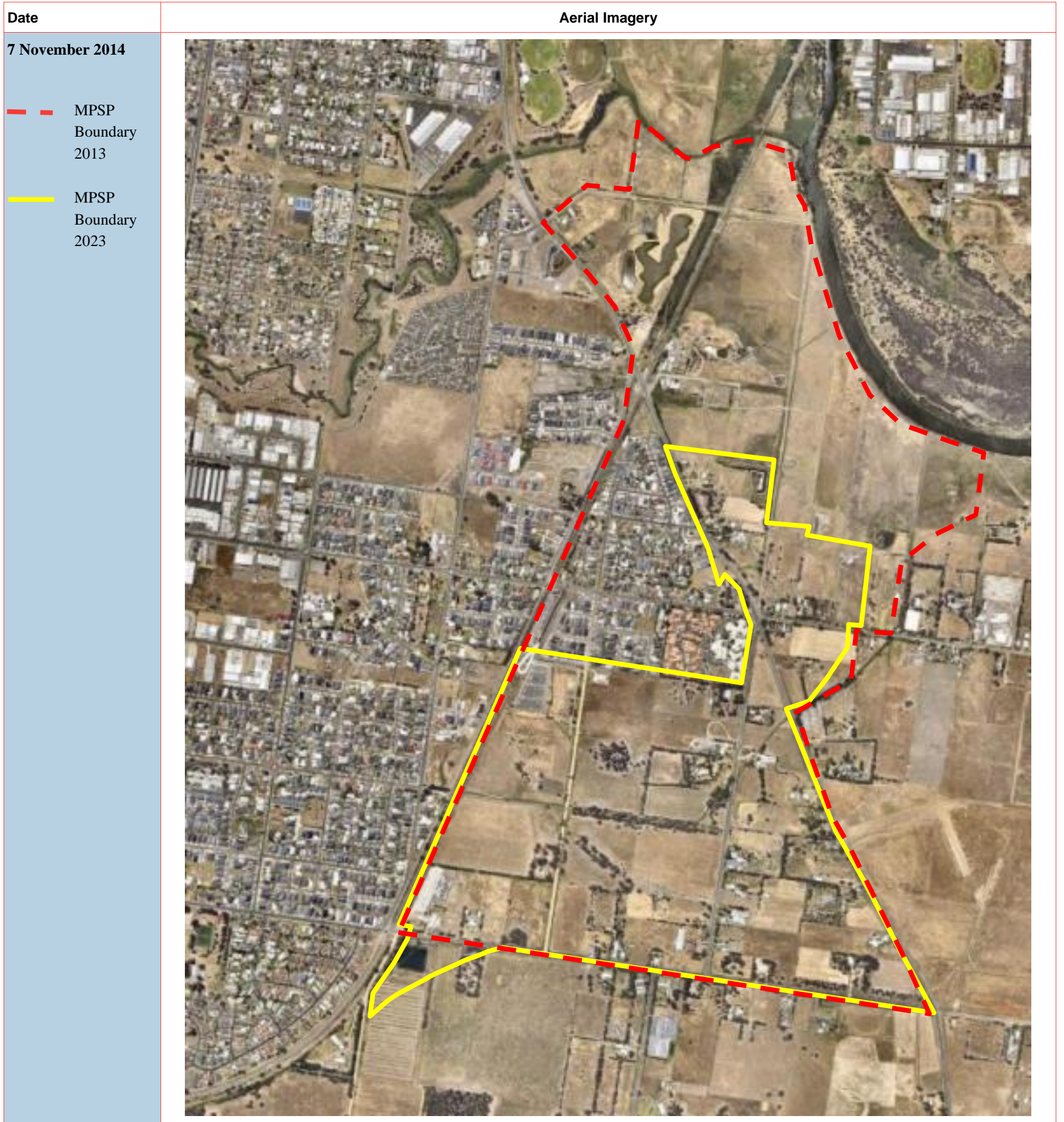
Attachment A
NearMap Aerial Images
(September 2013 to June 2023)

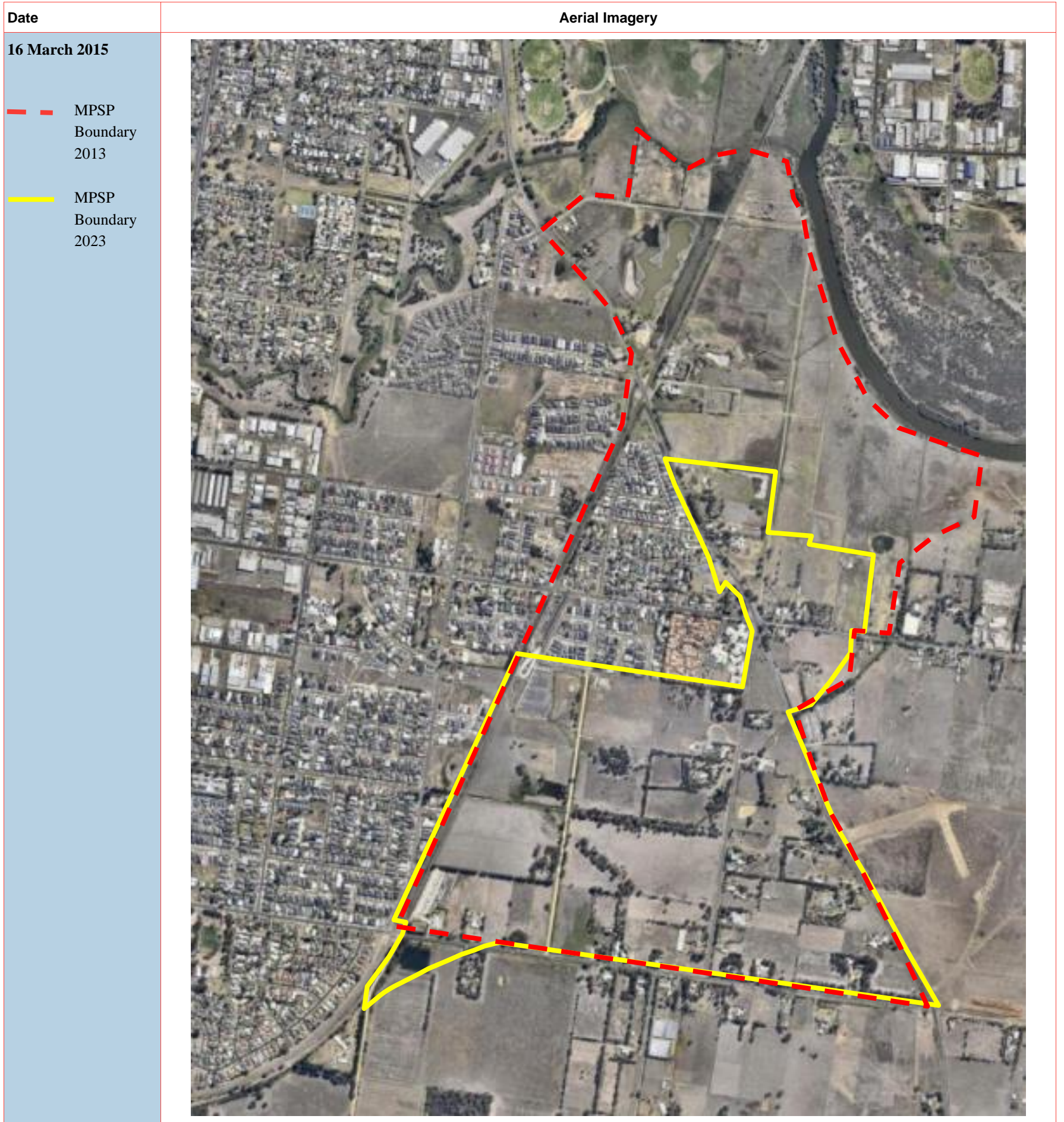
Table A.1 NearMap Aerial Images

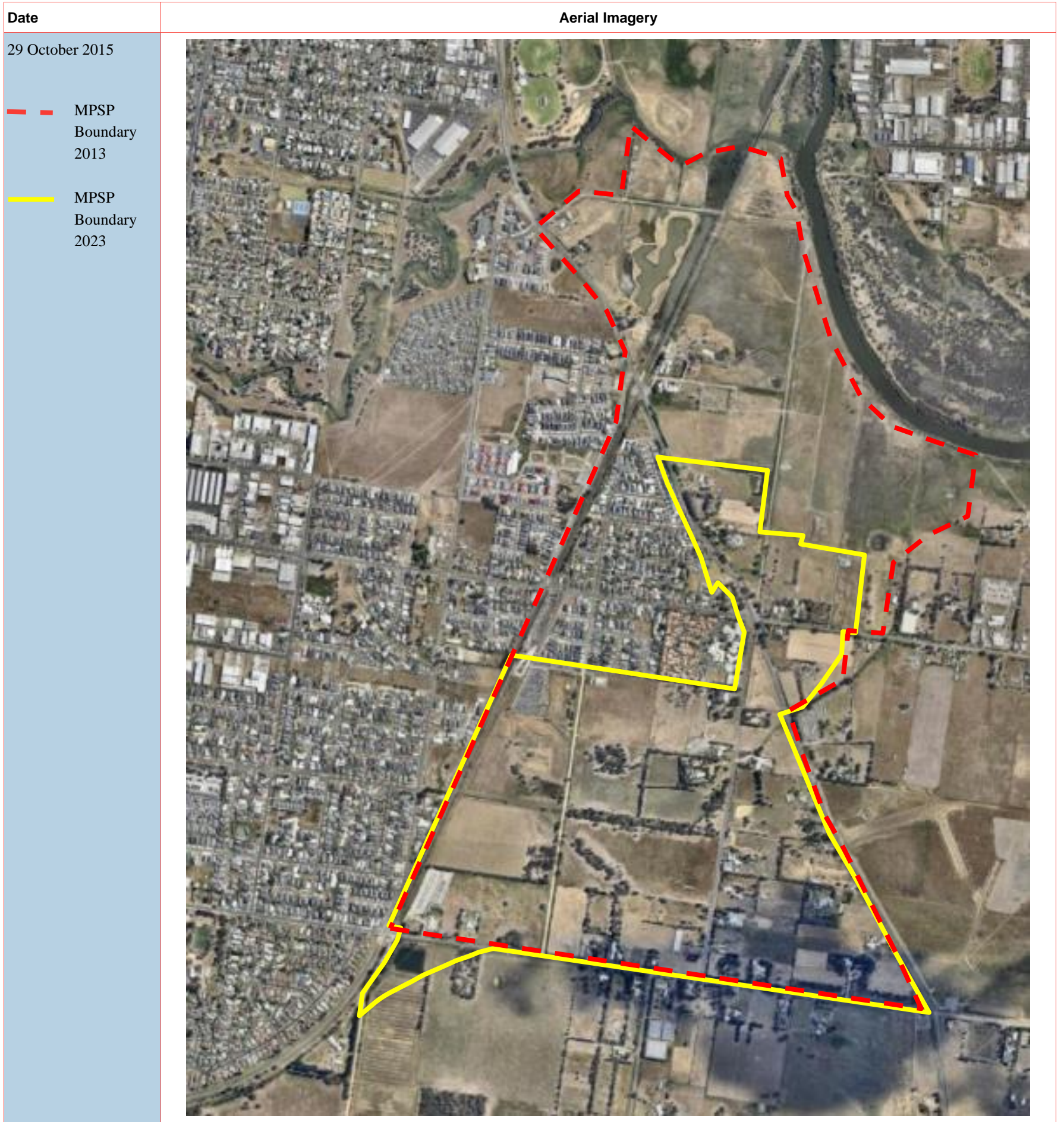
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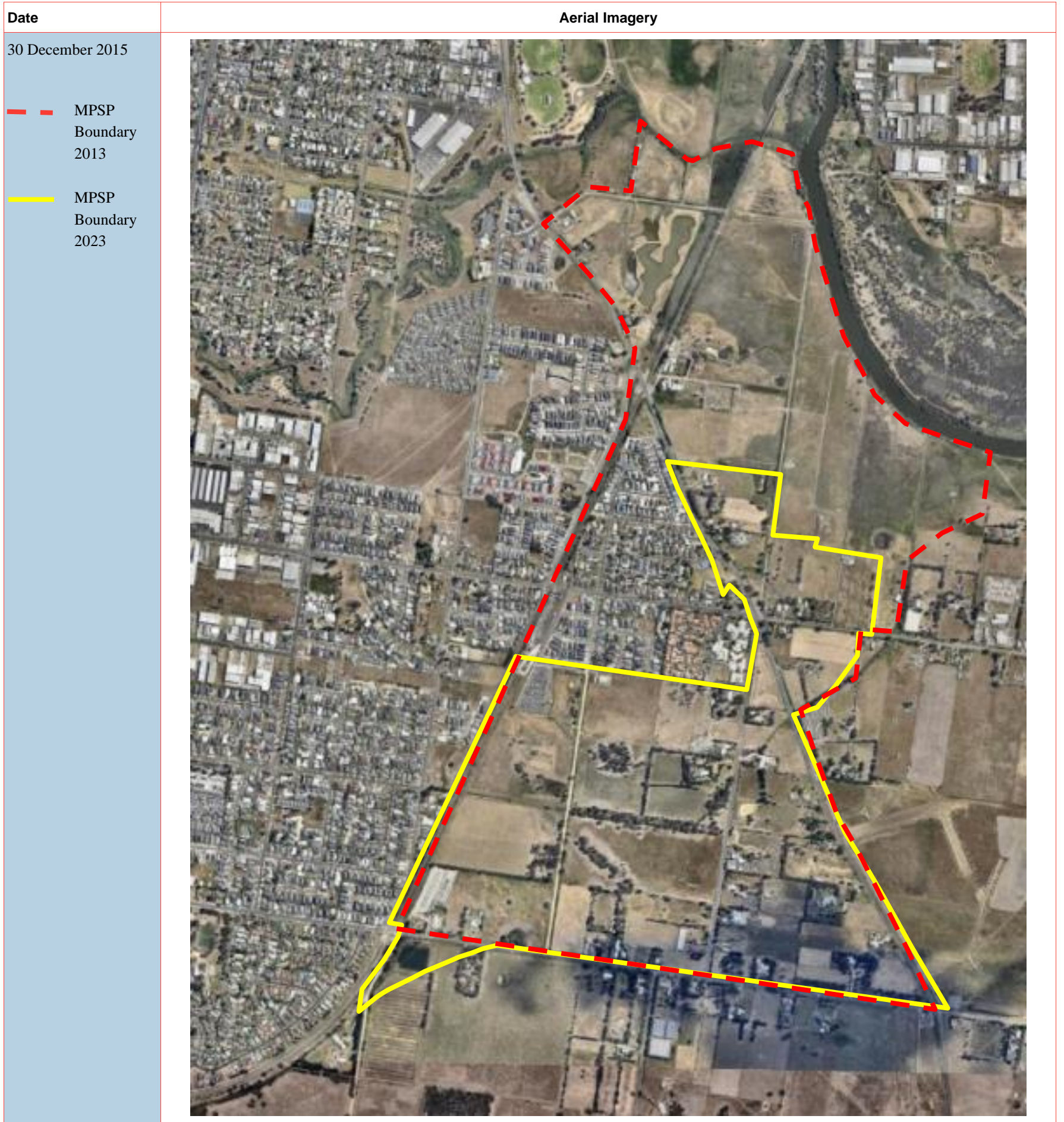


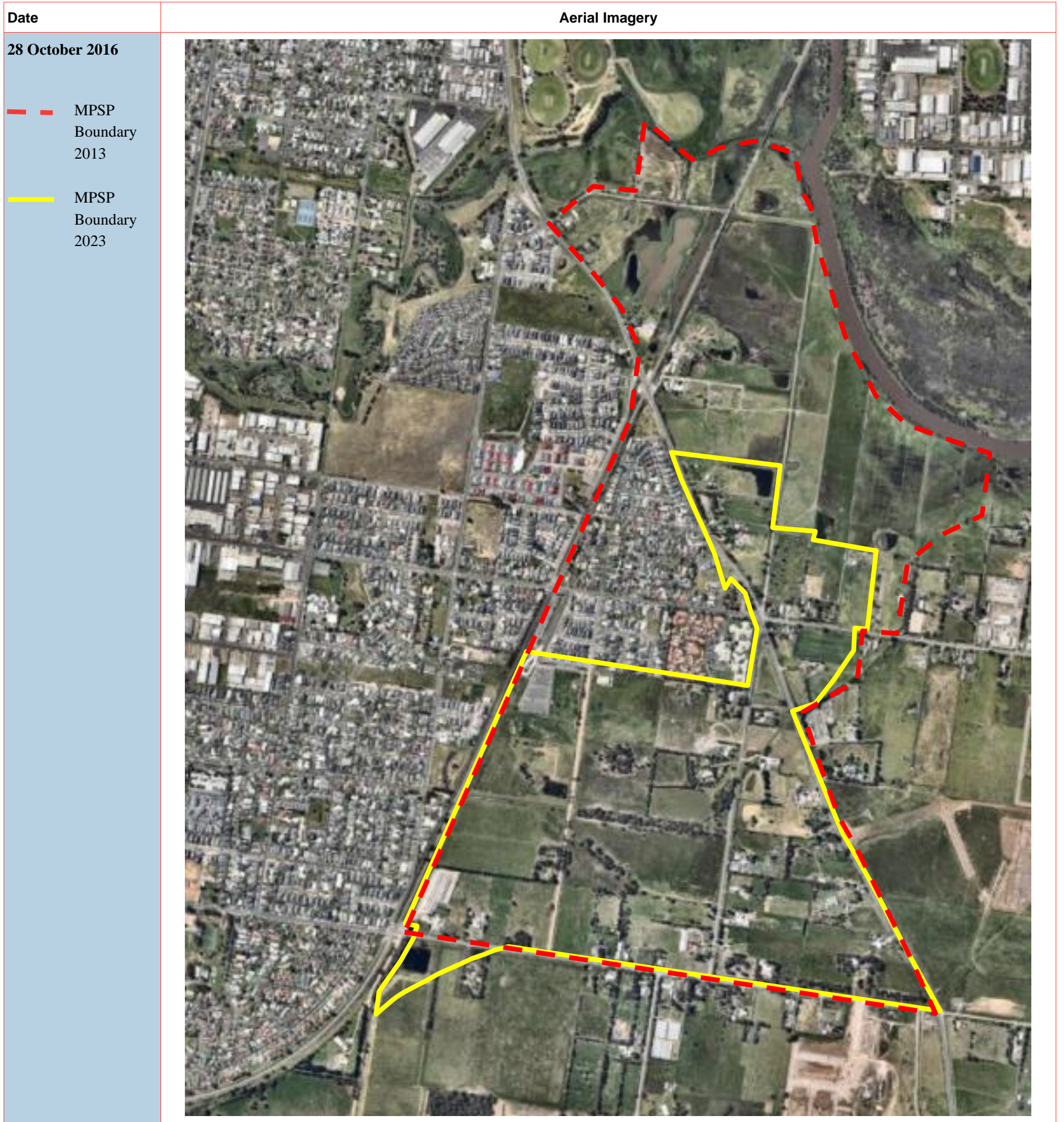


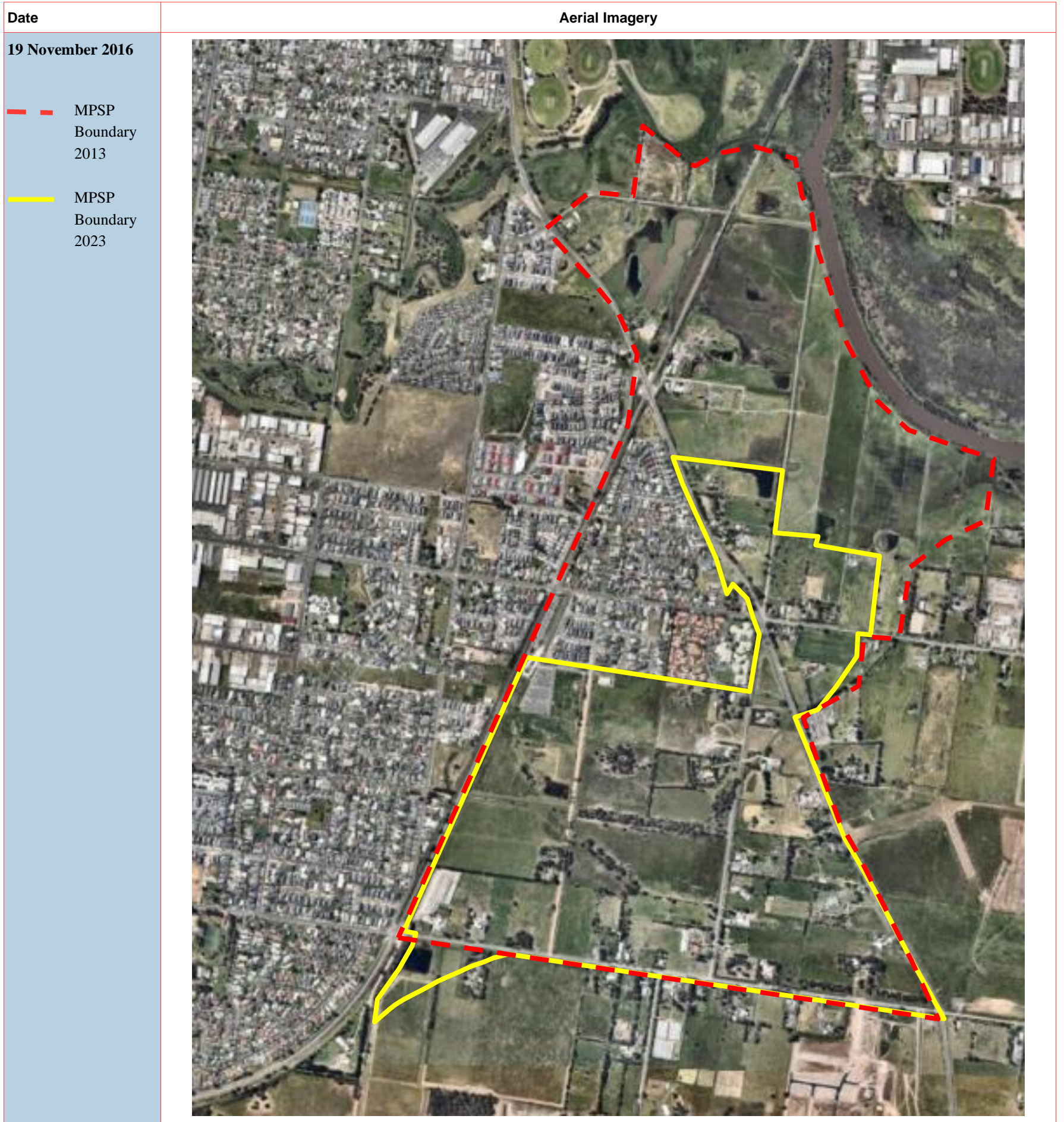


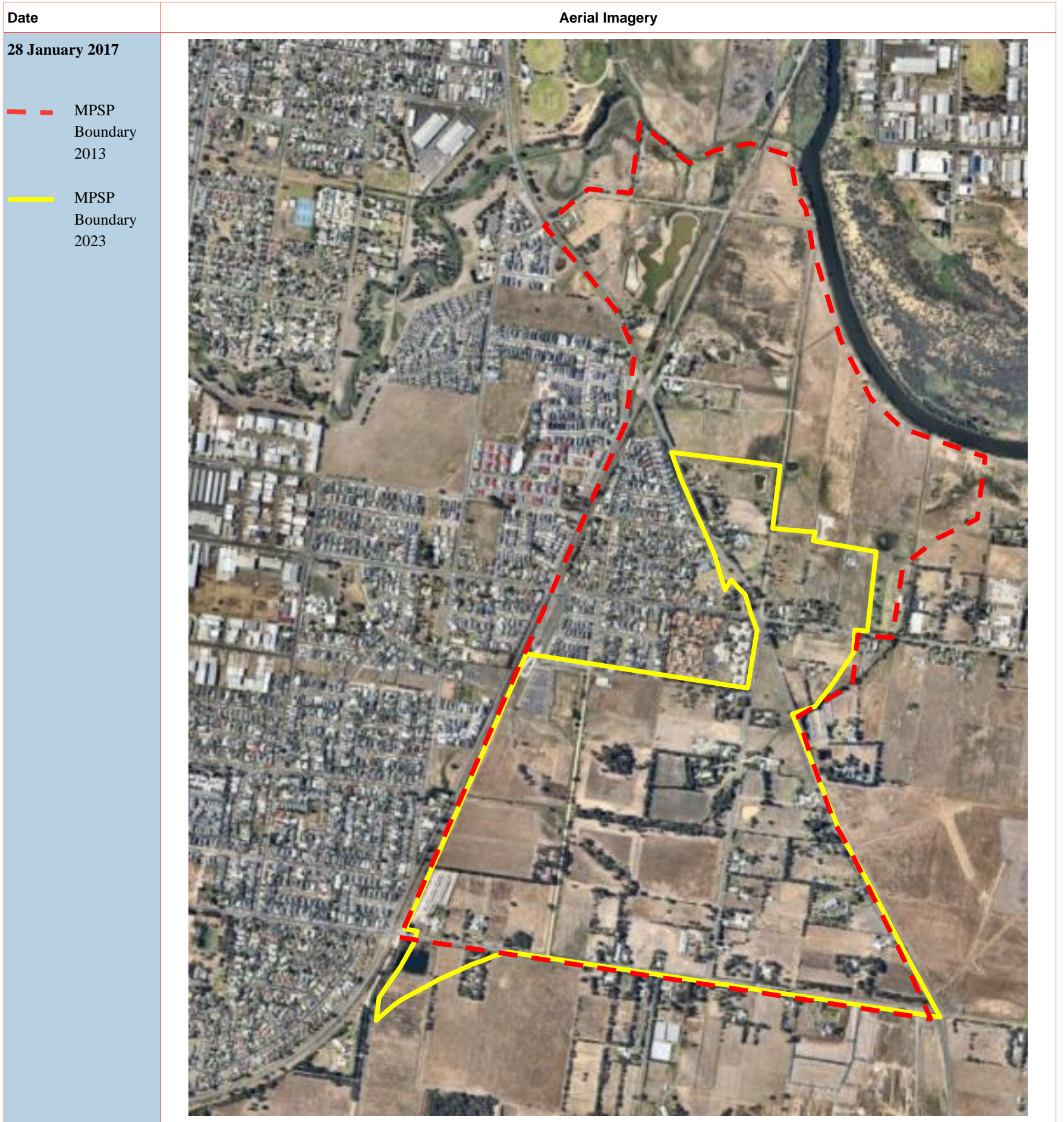




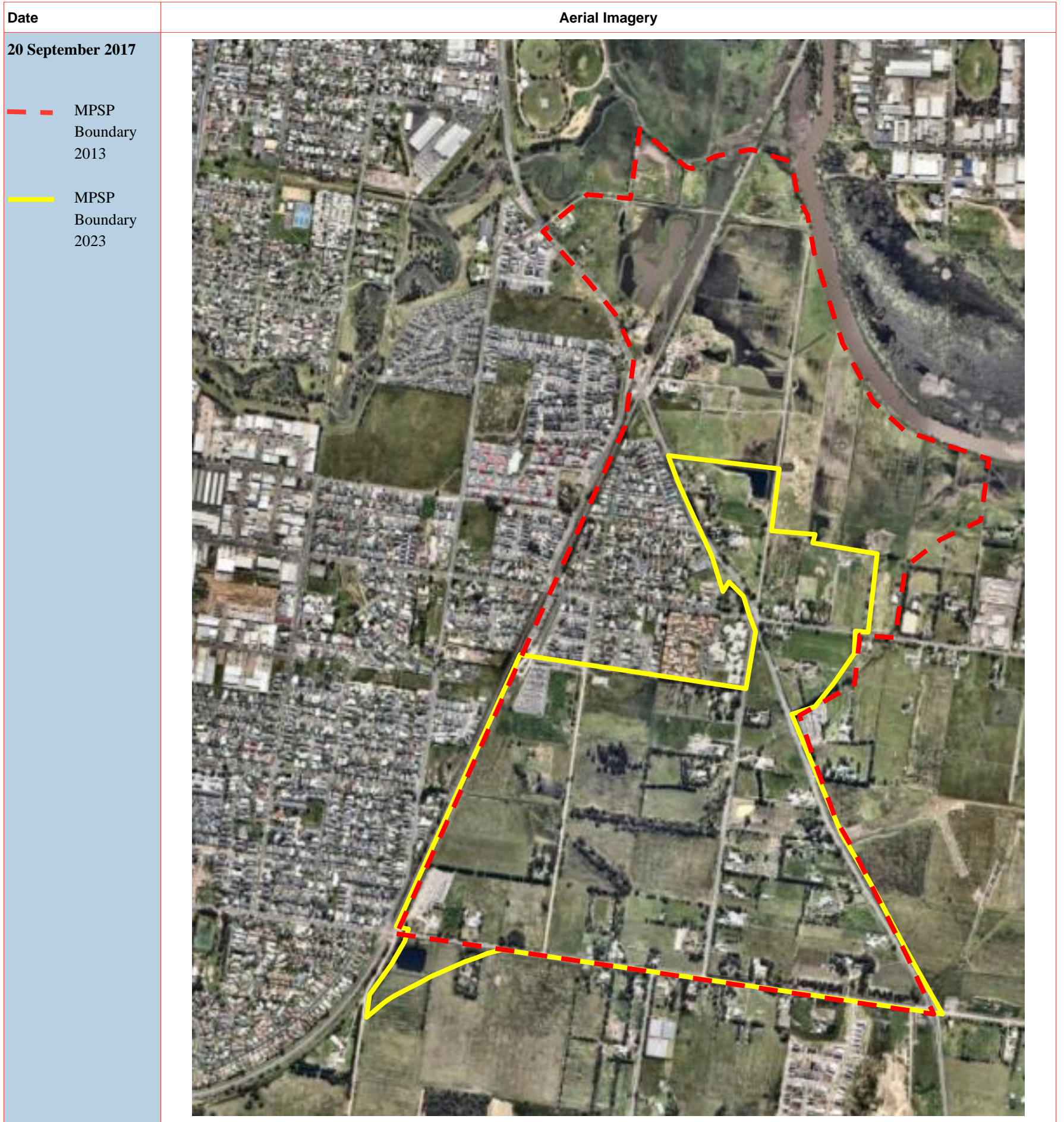


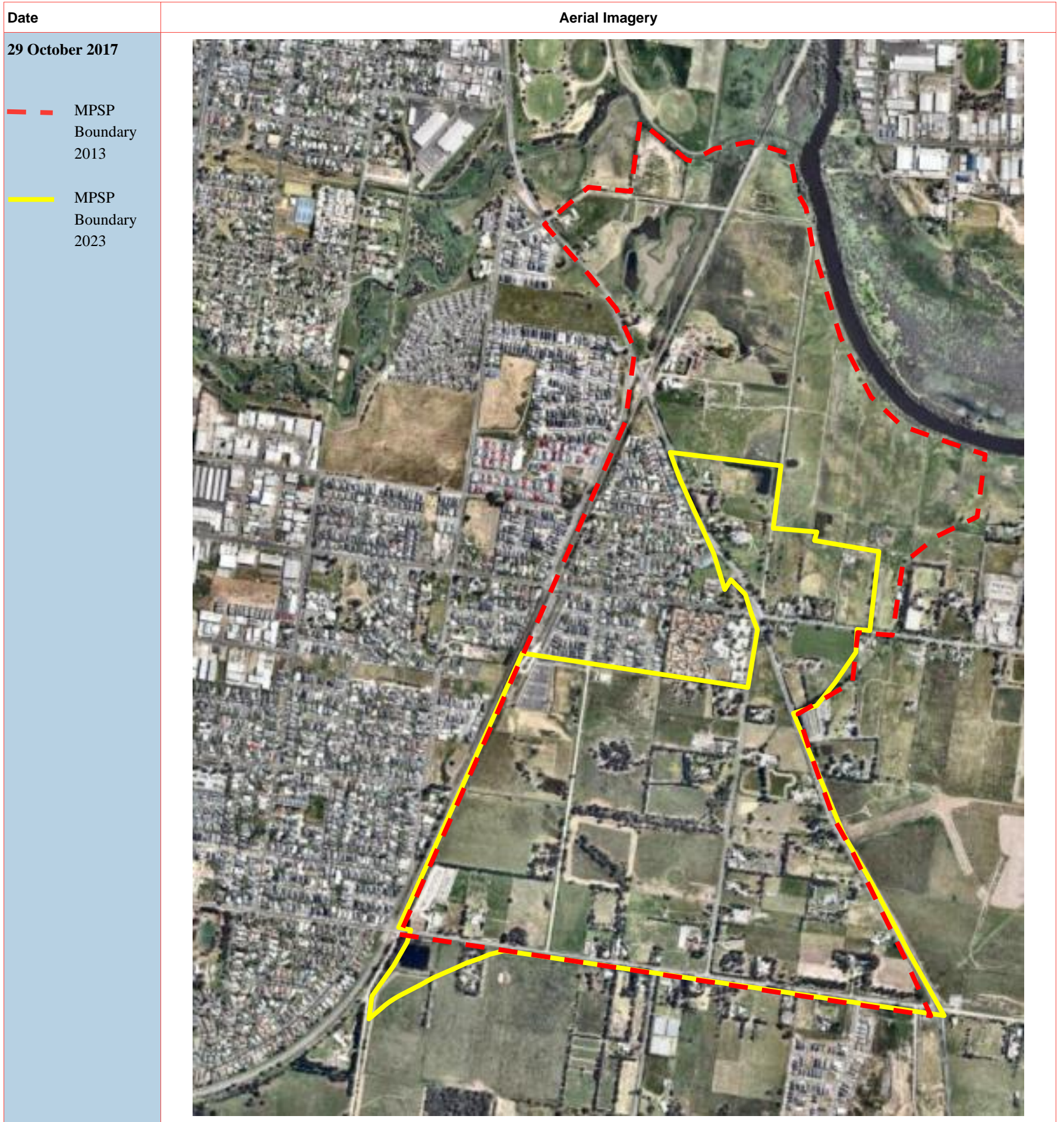


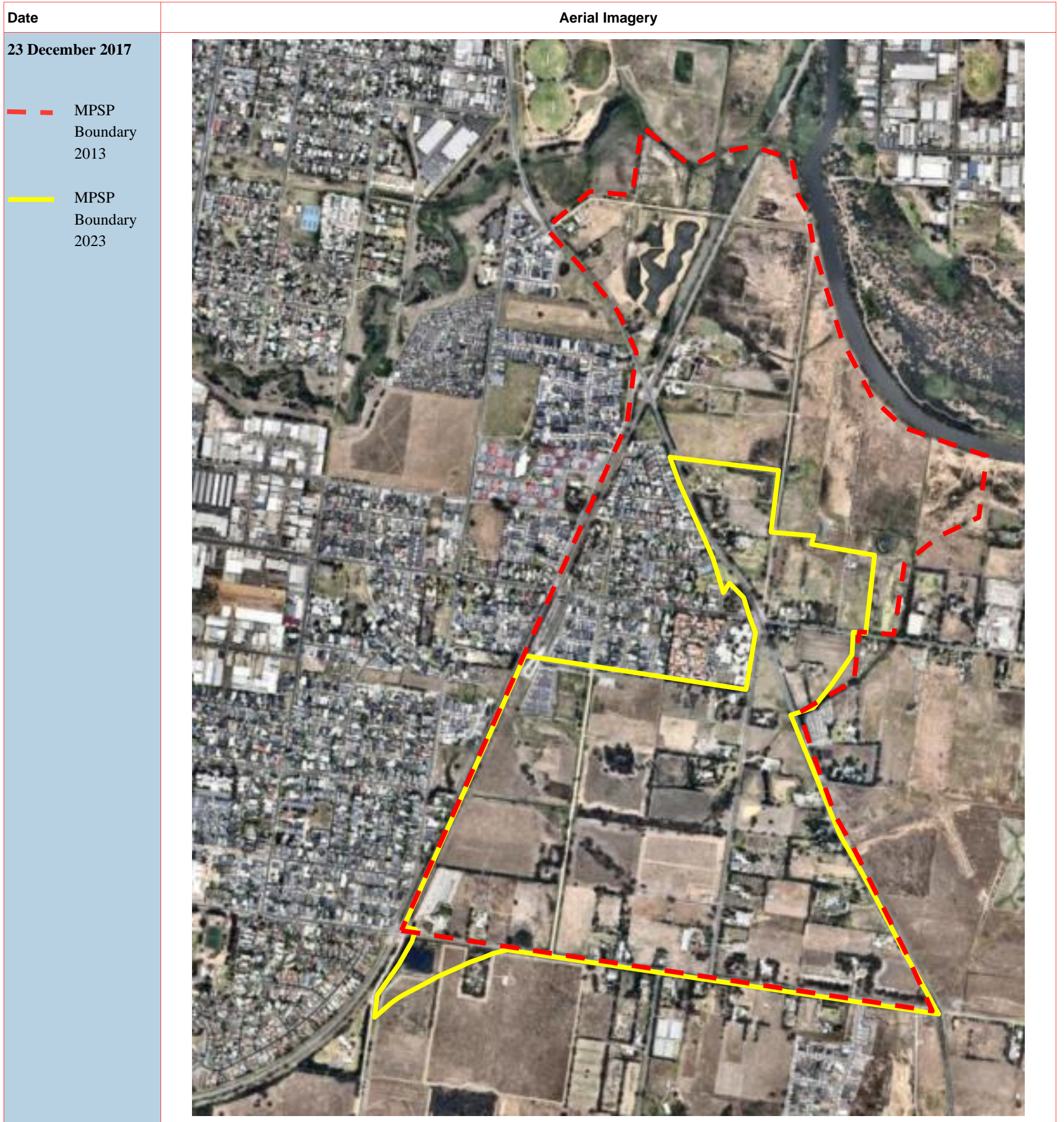


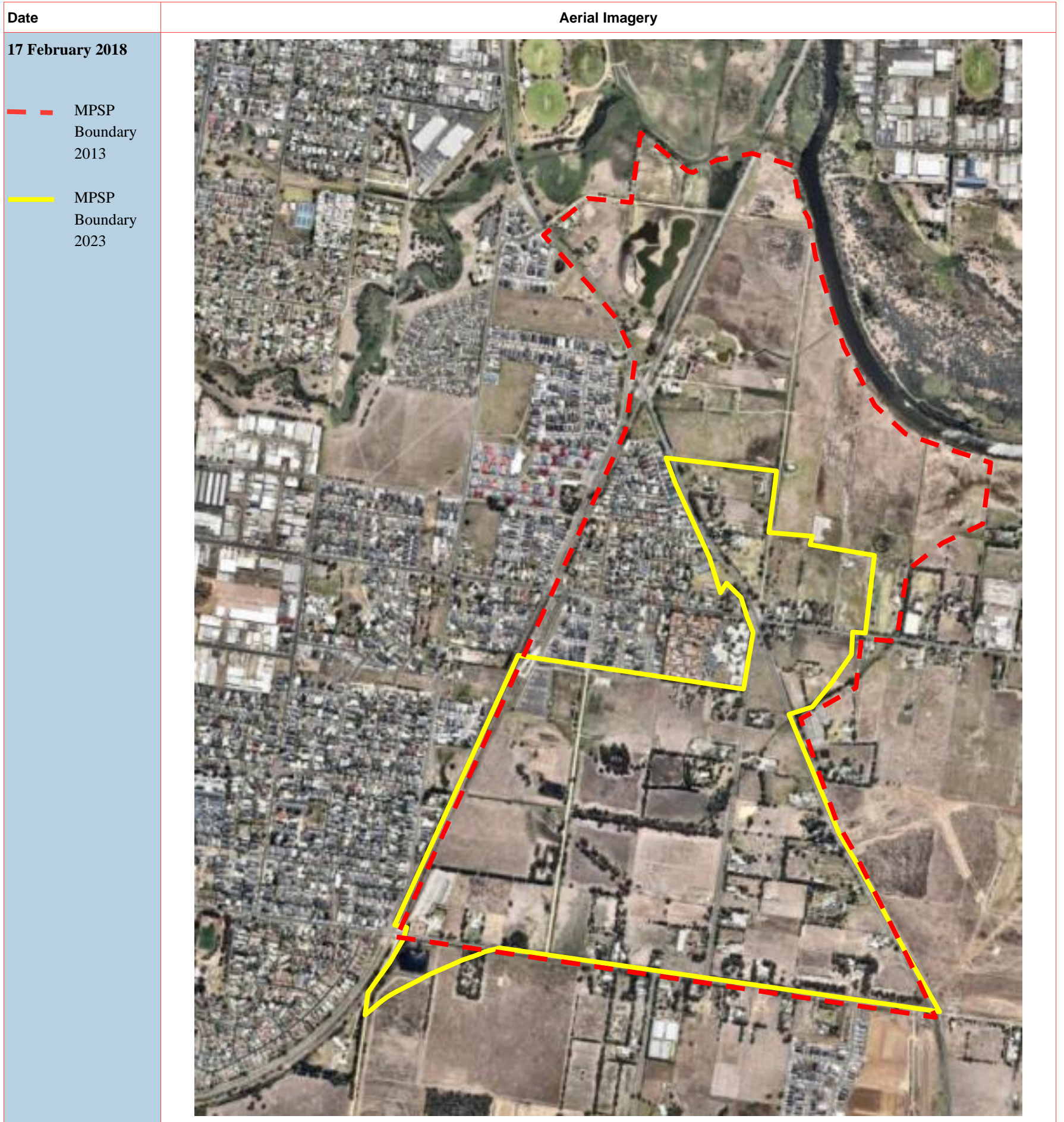


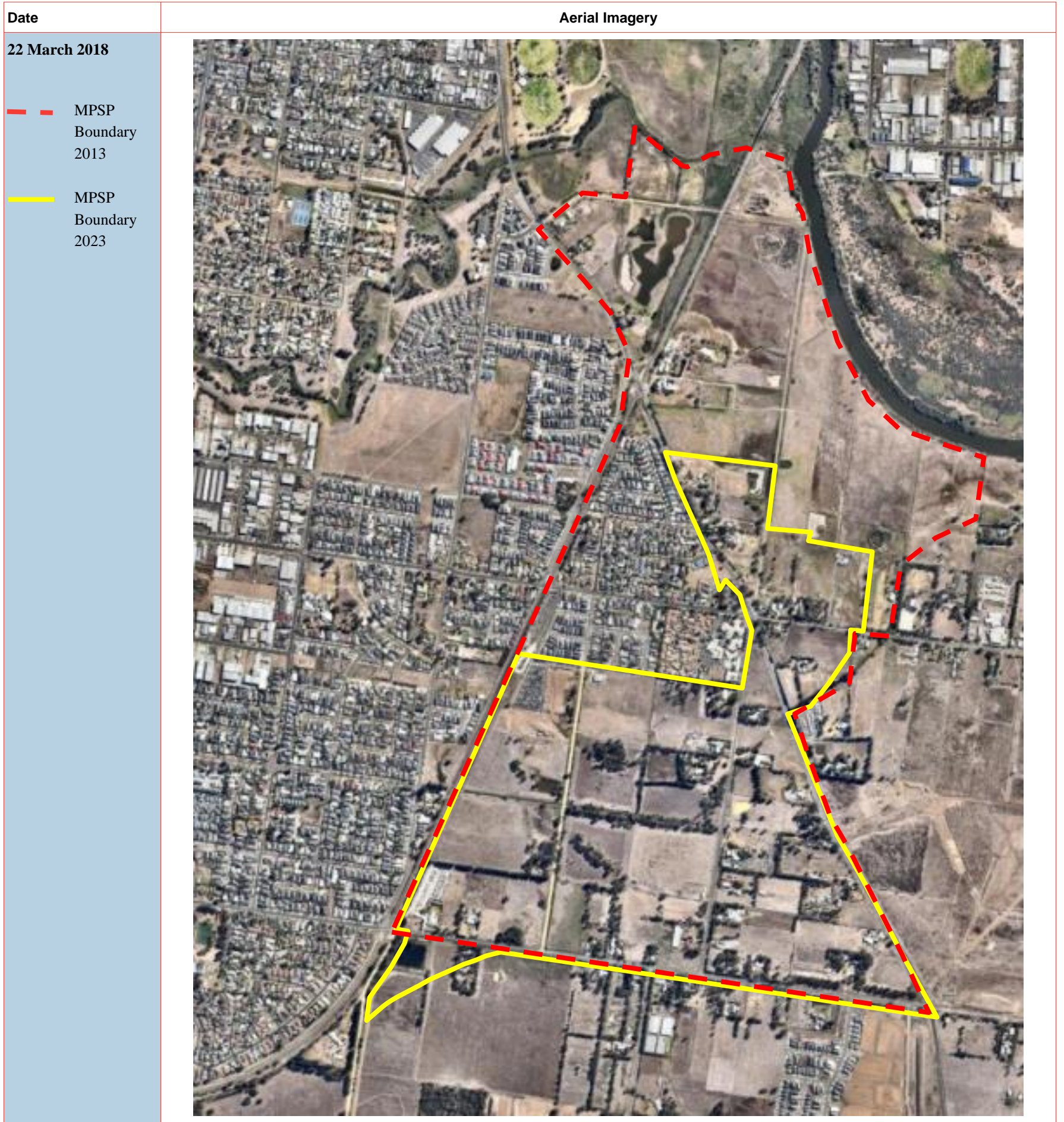


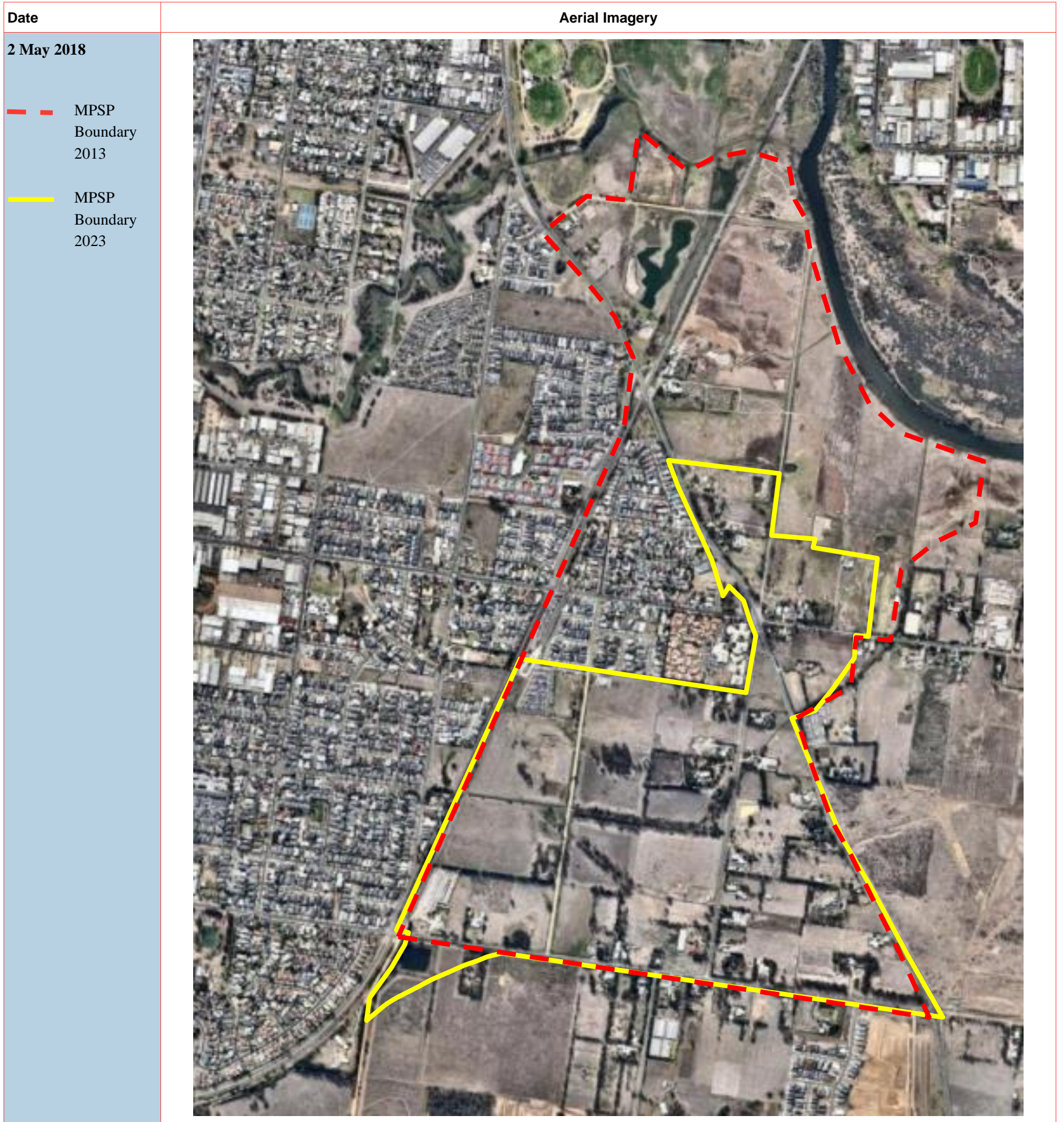




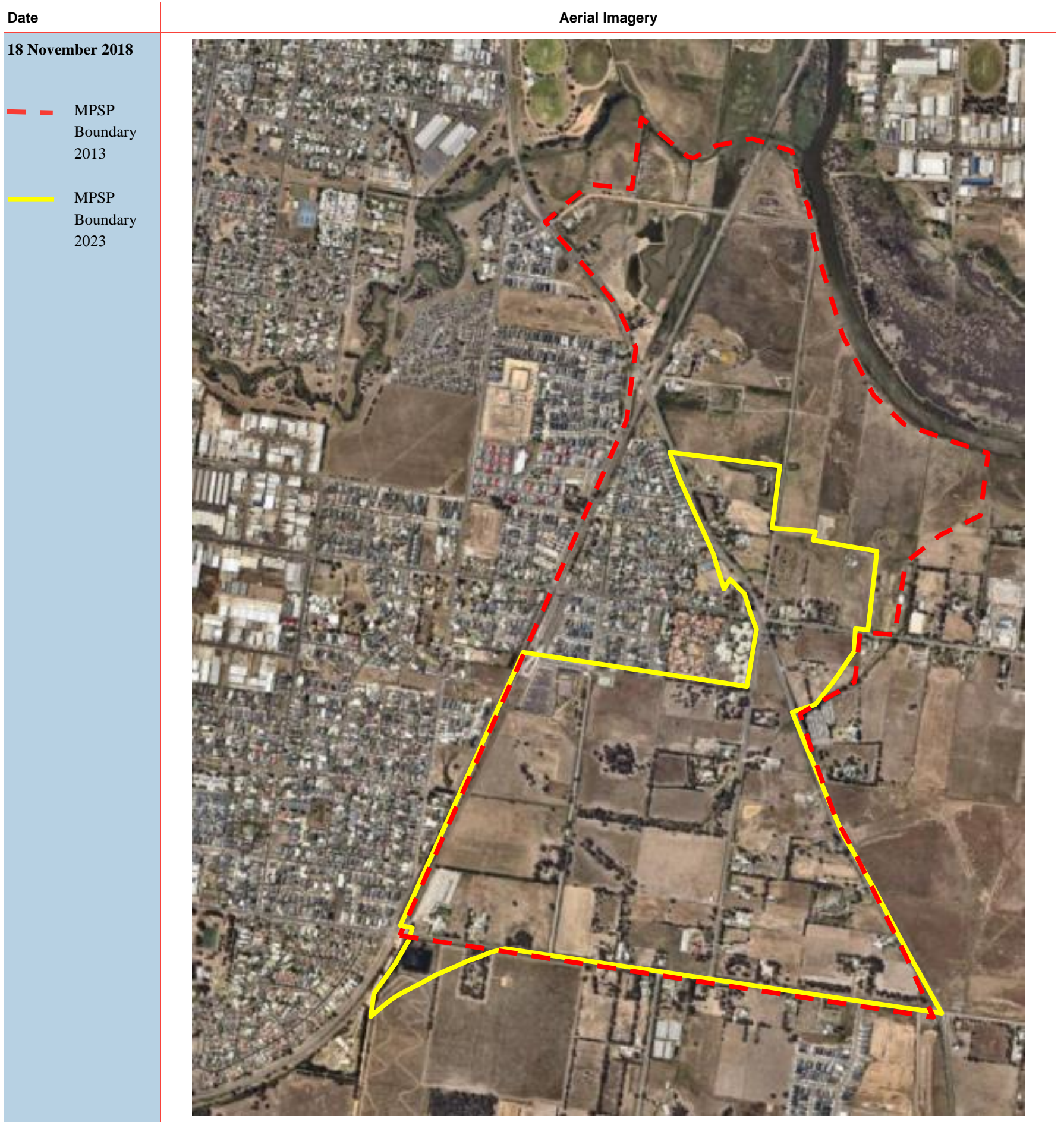


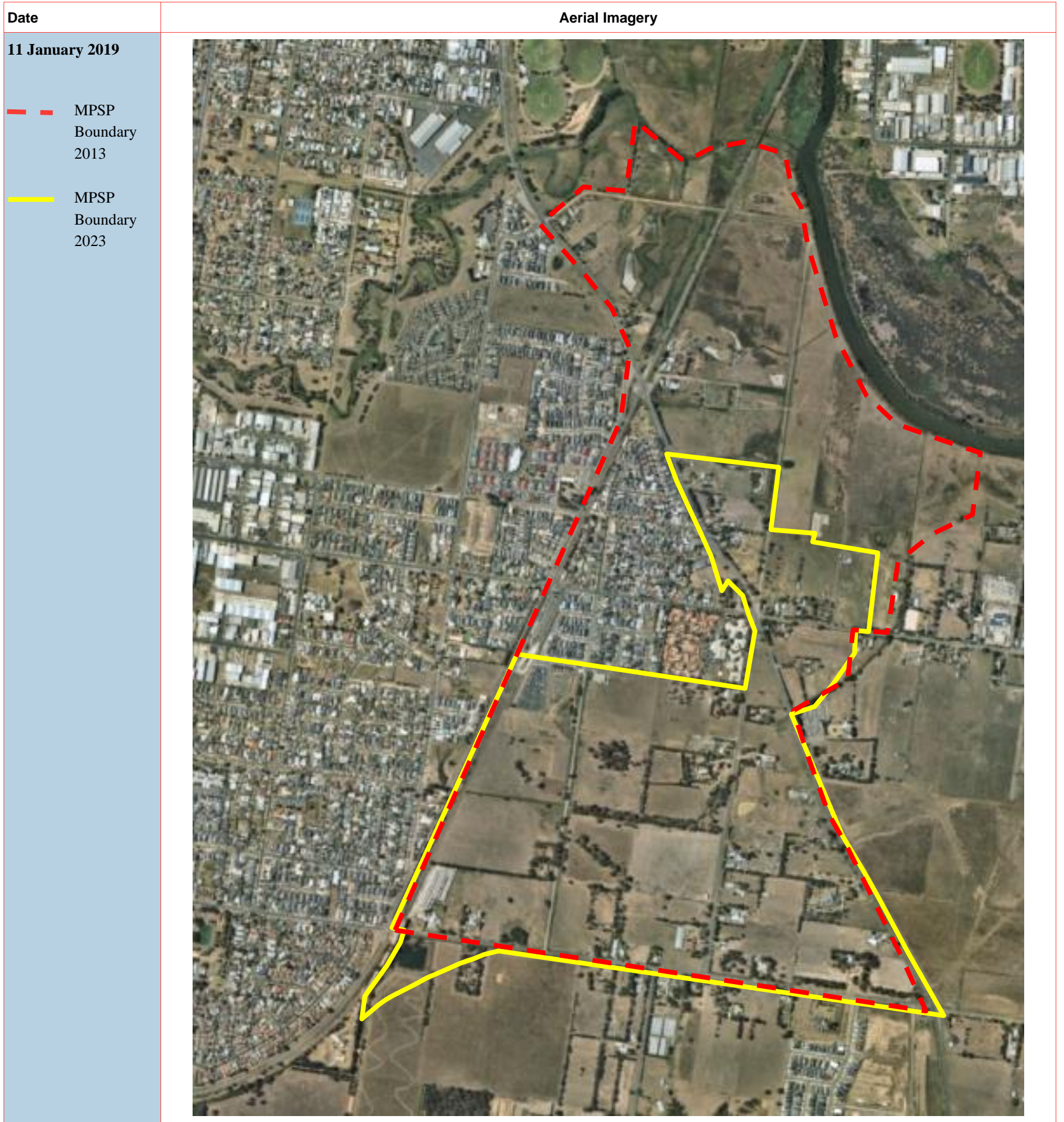


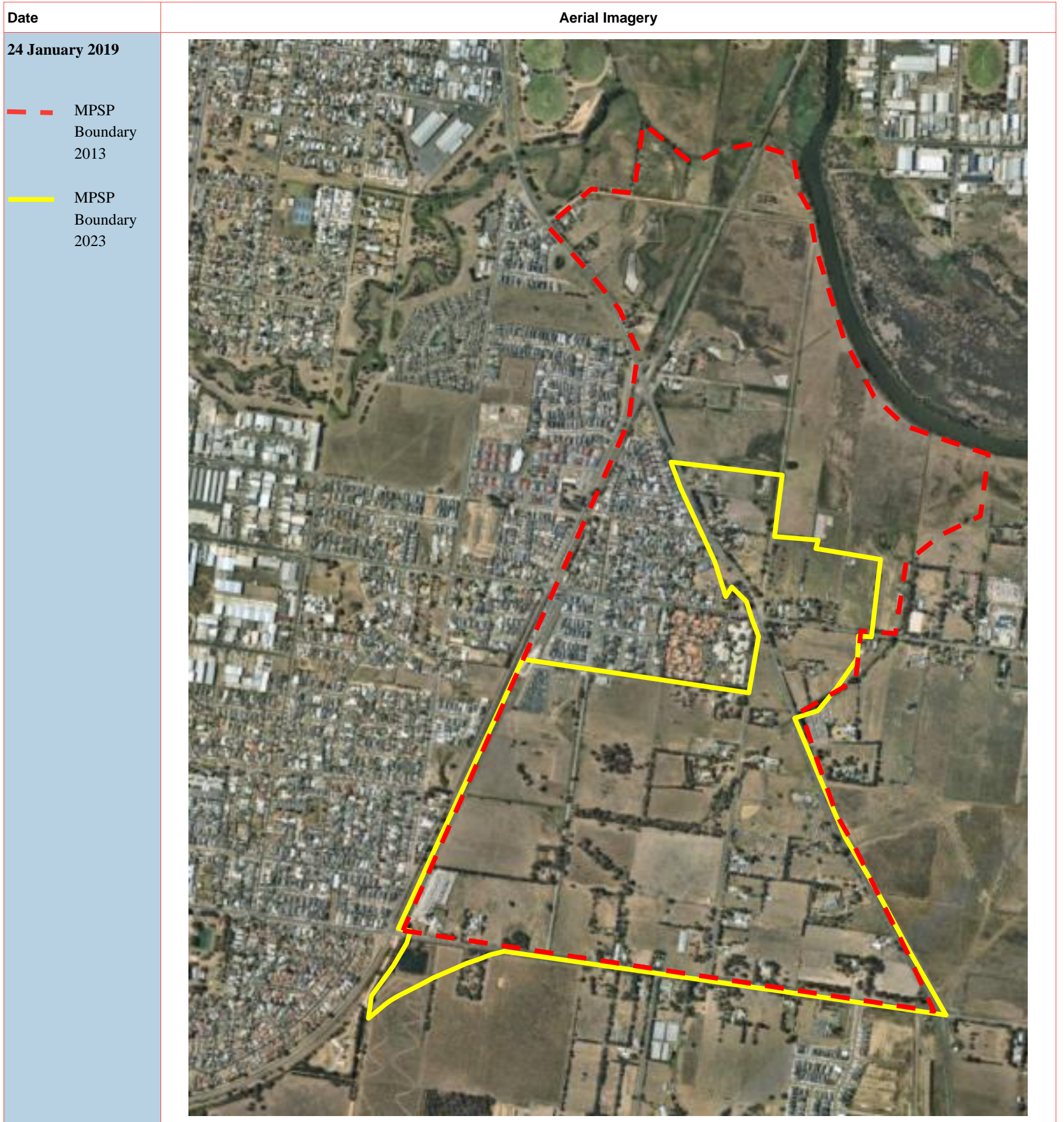


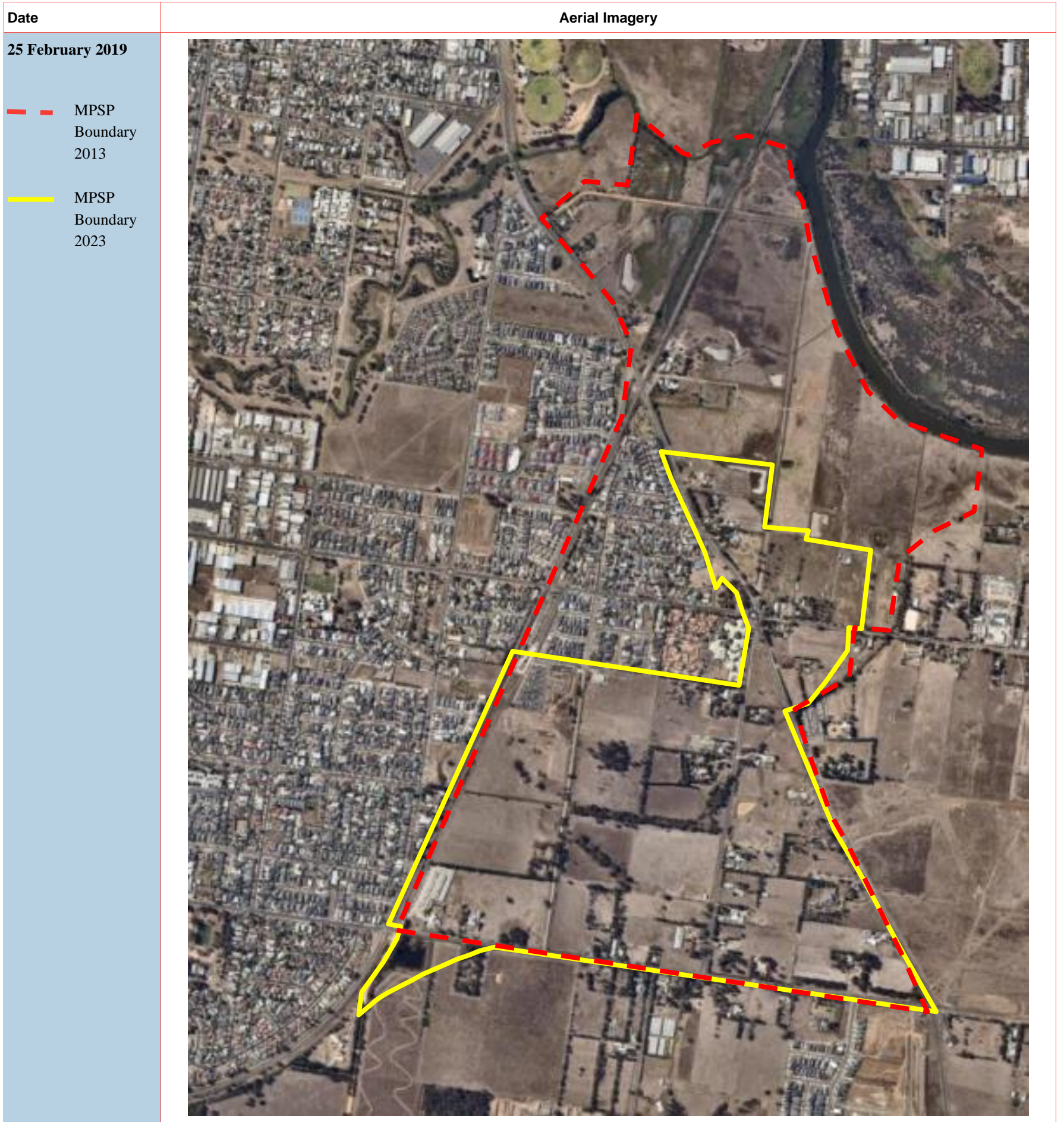








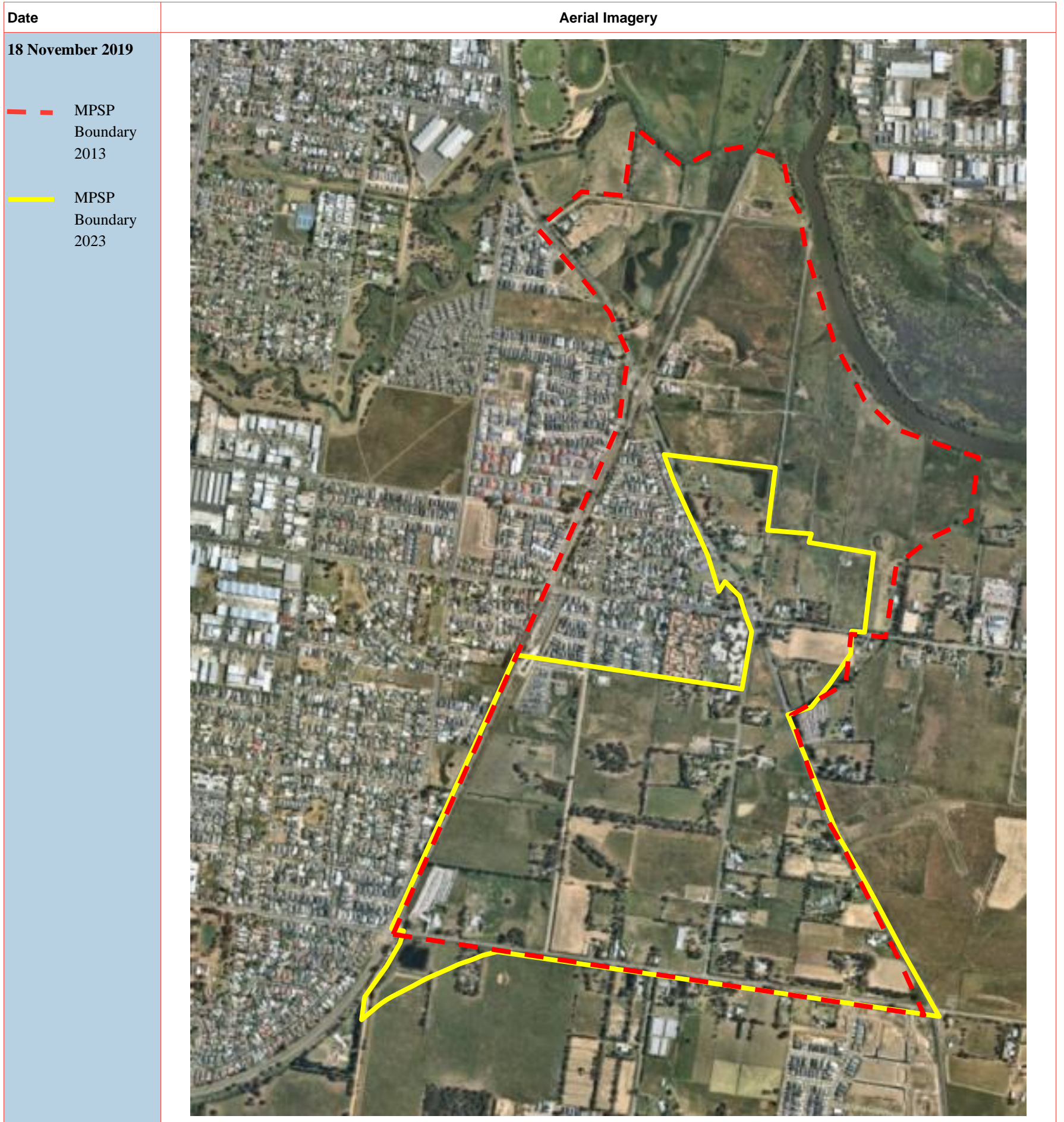


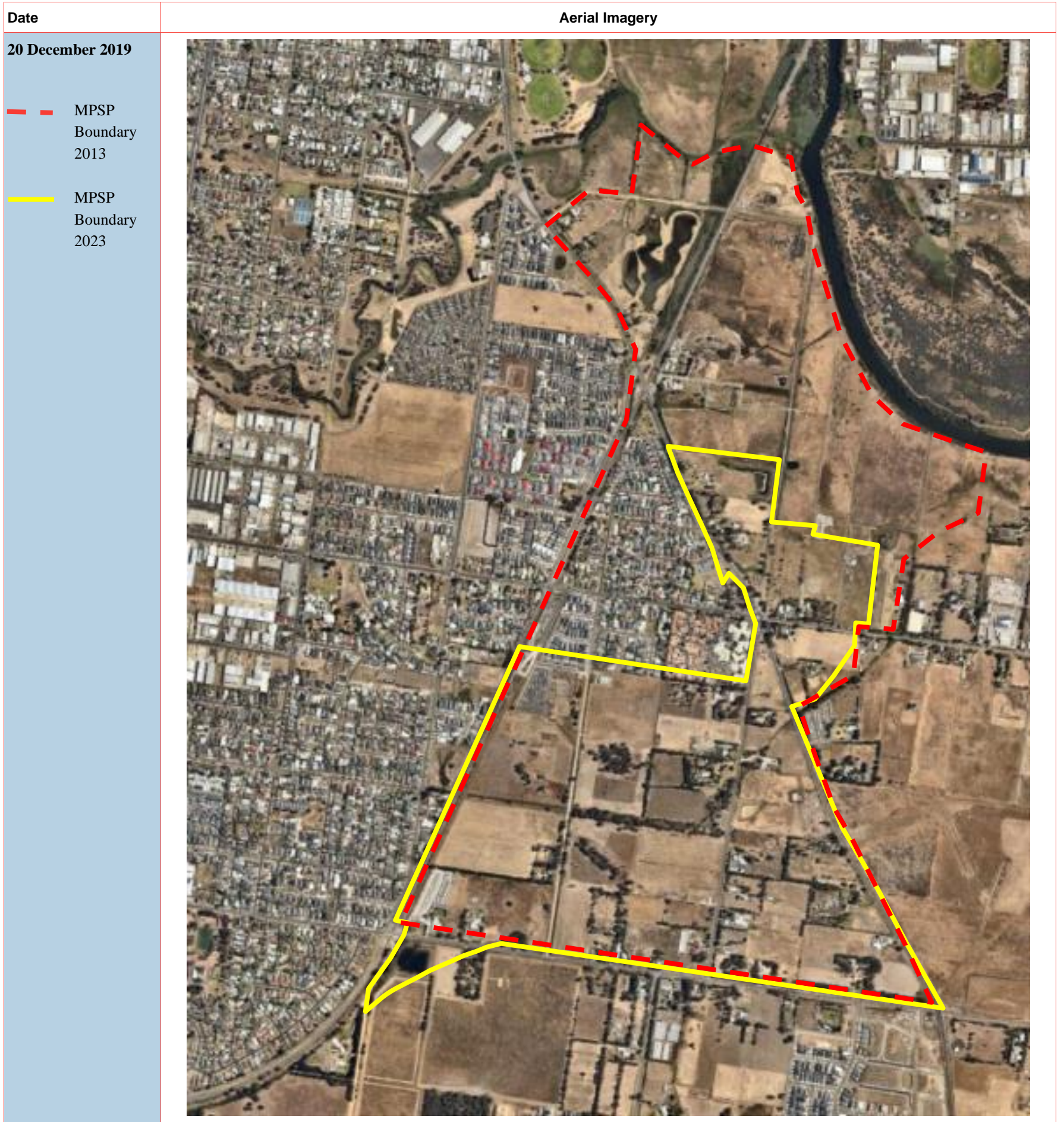






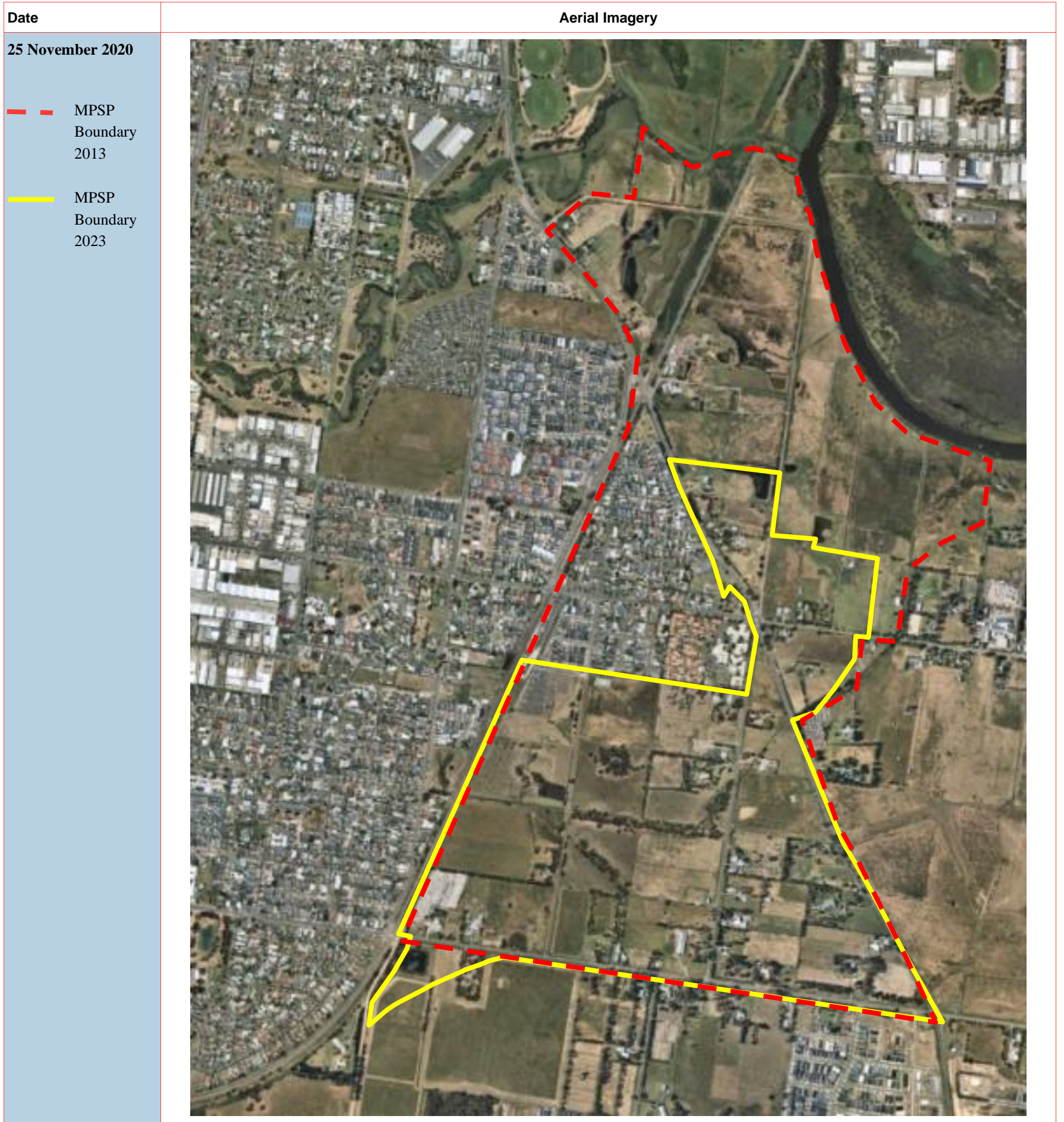


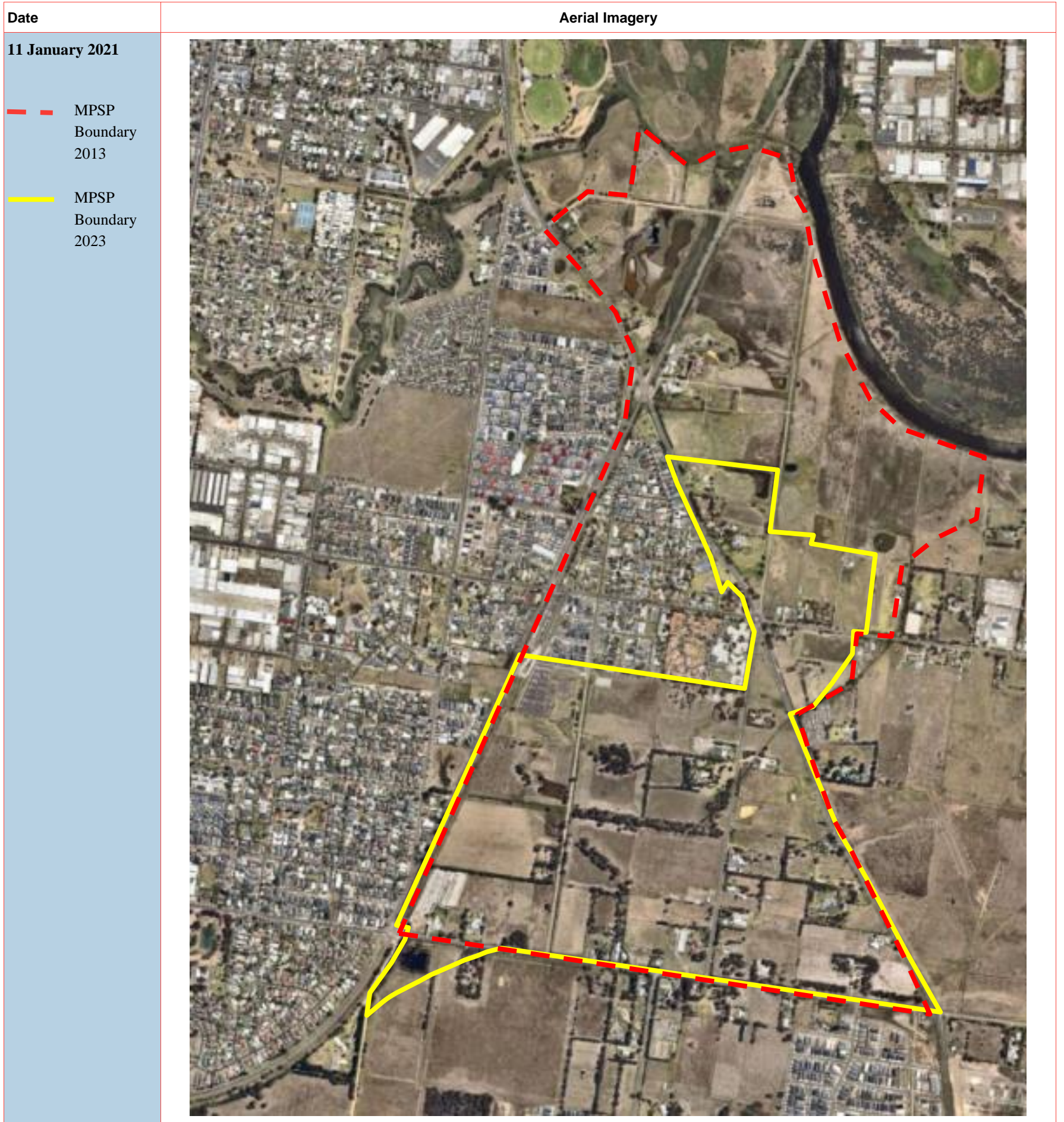


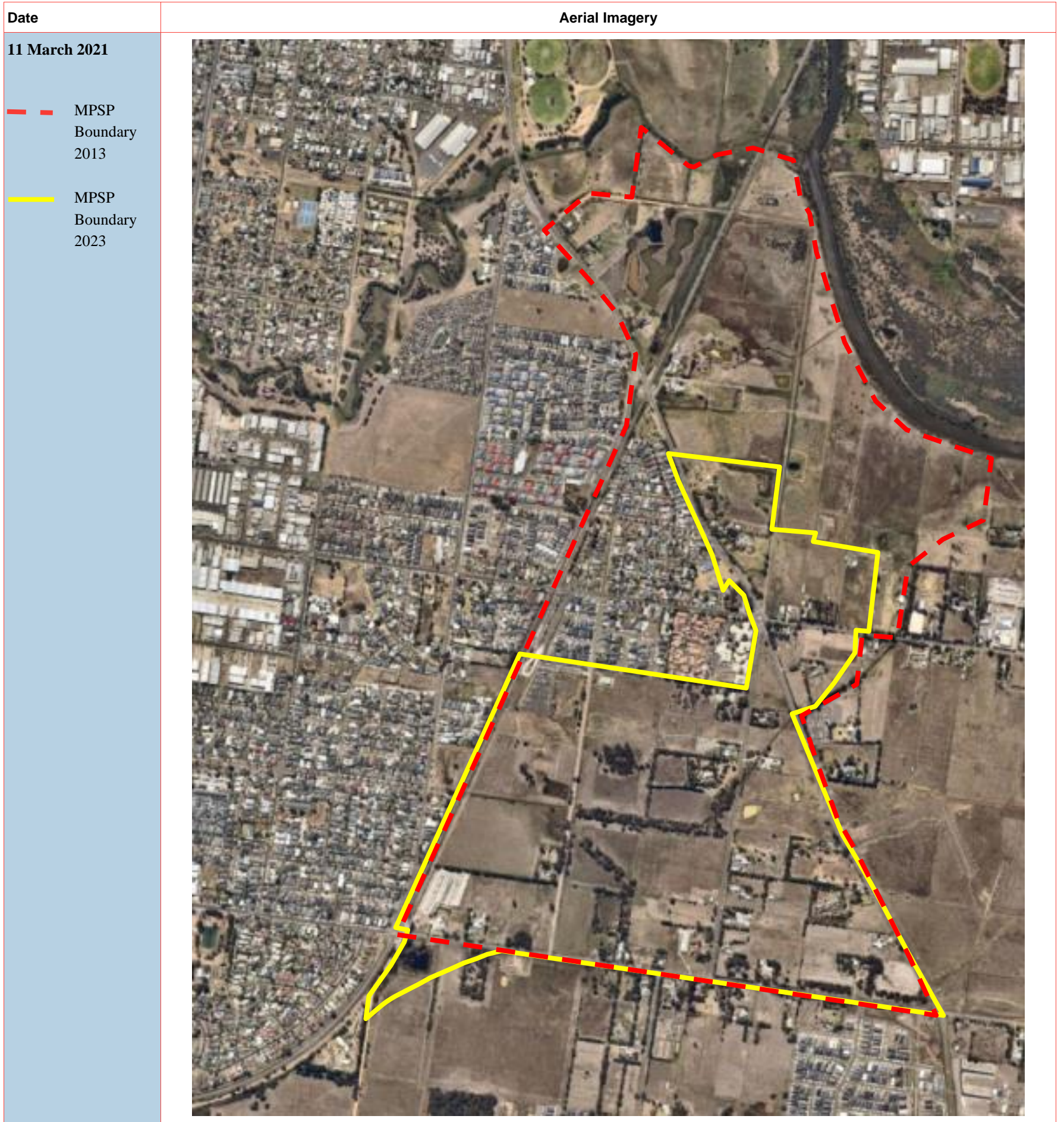


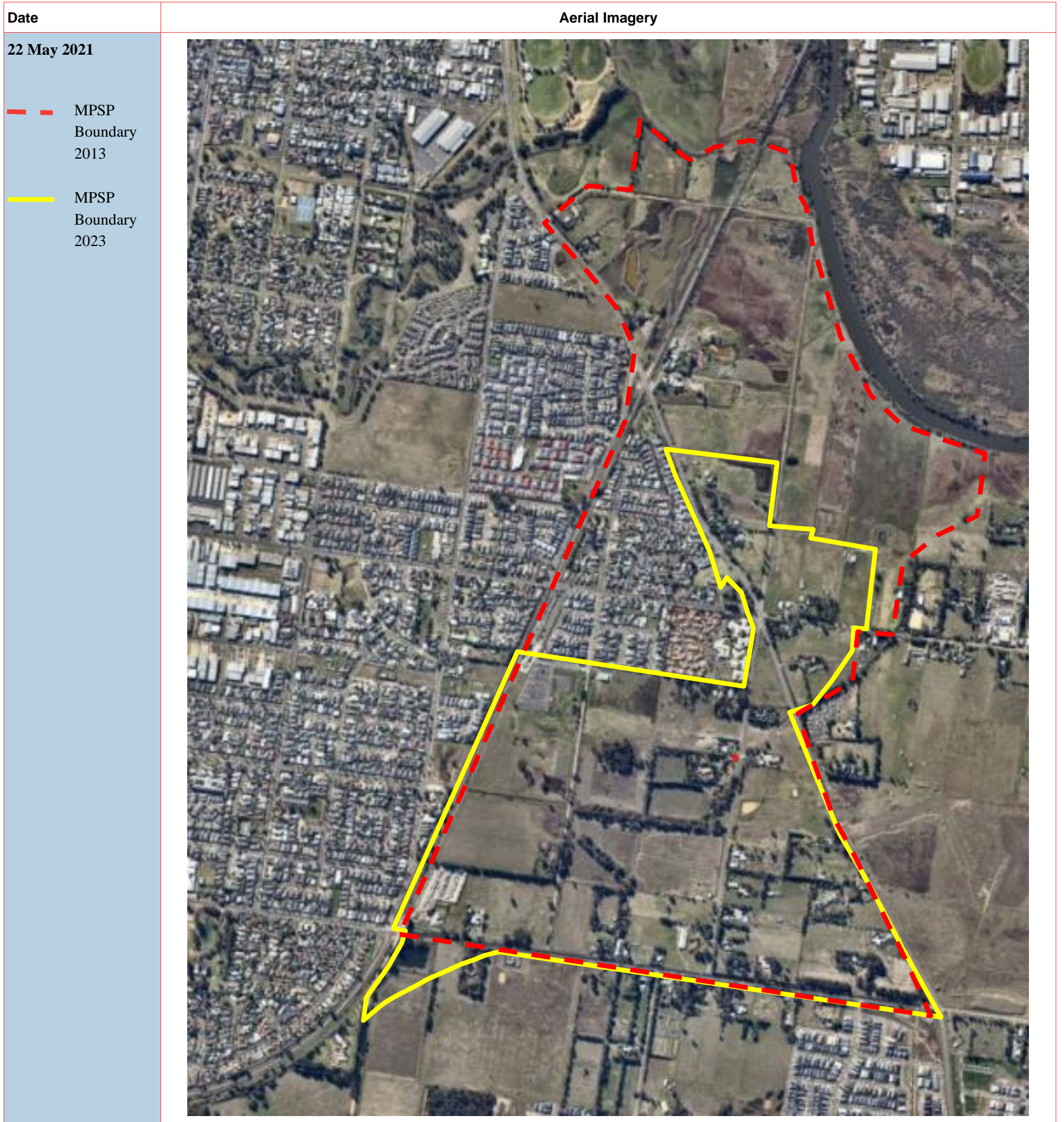






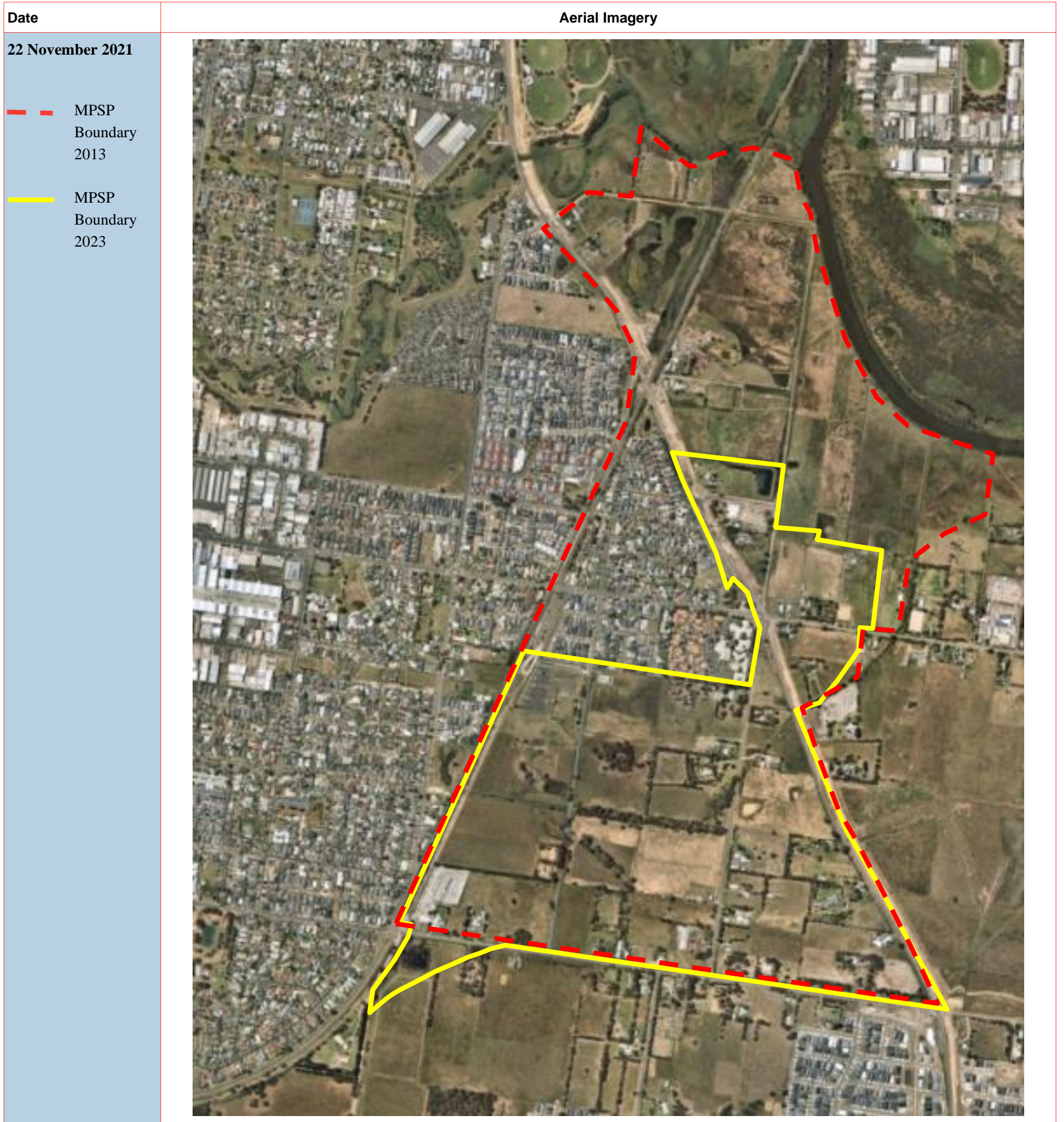


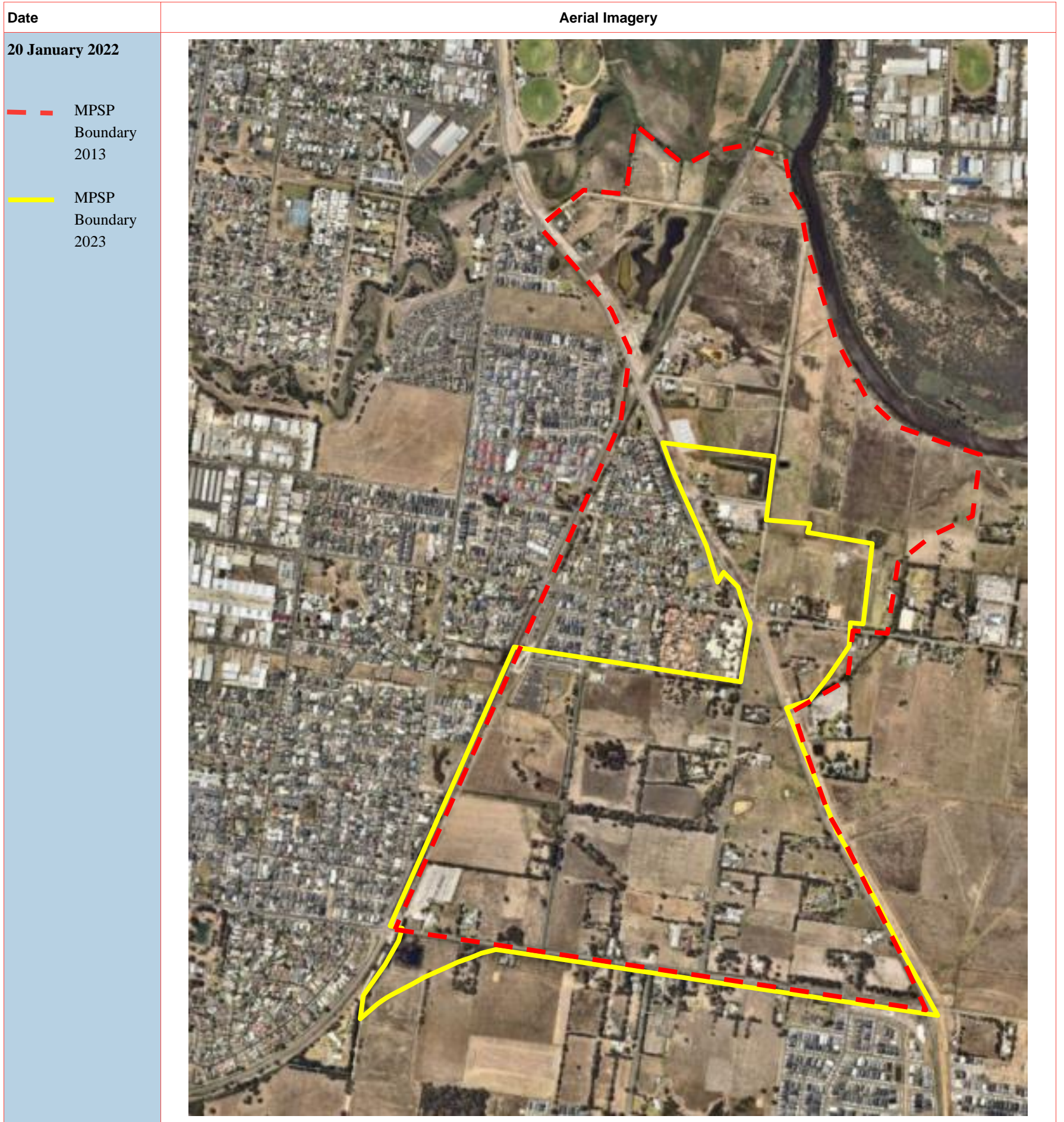


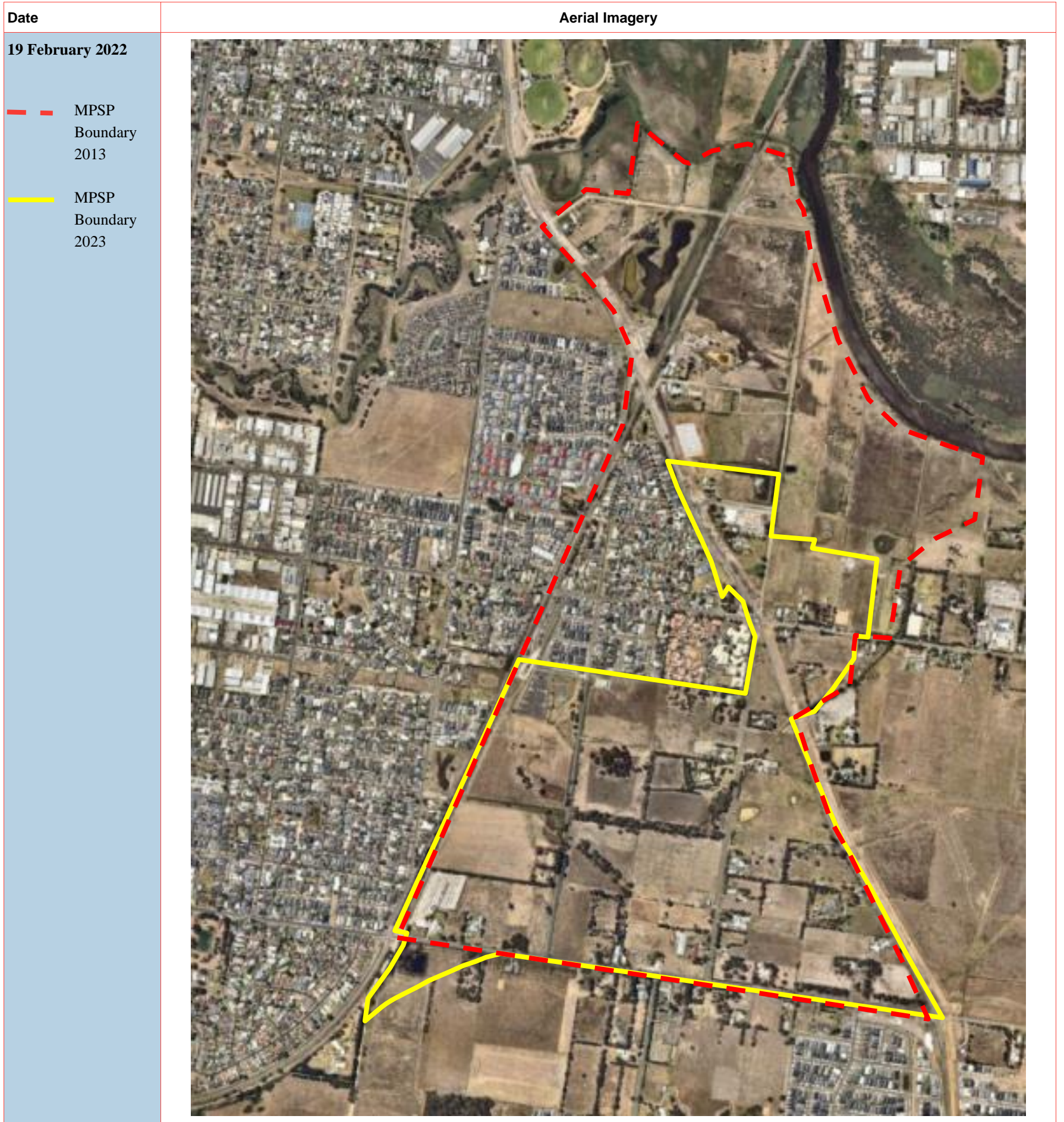


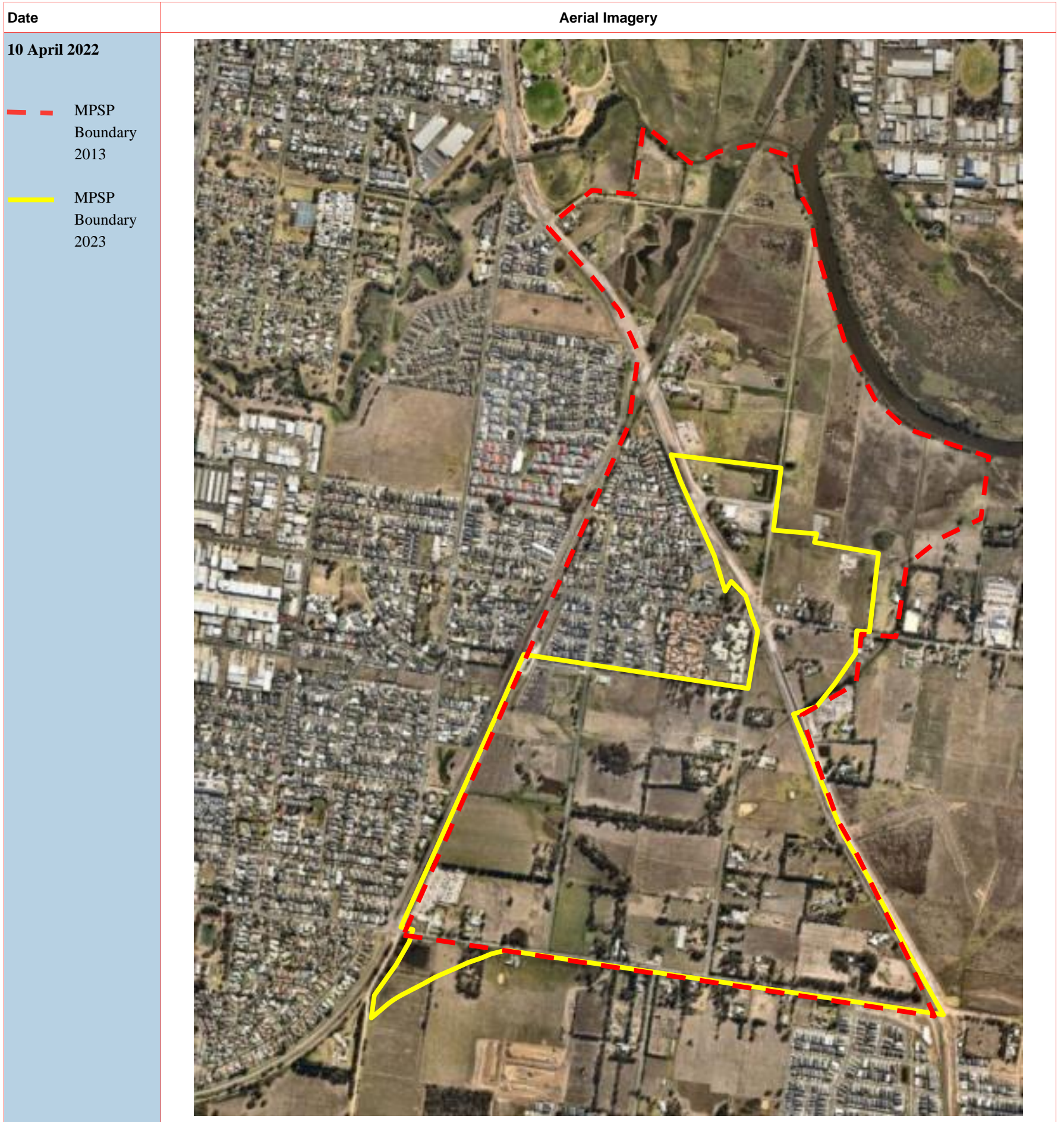


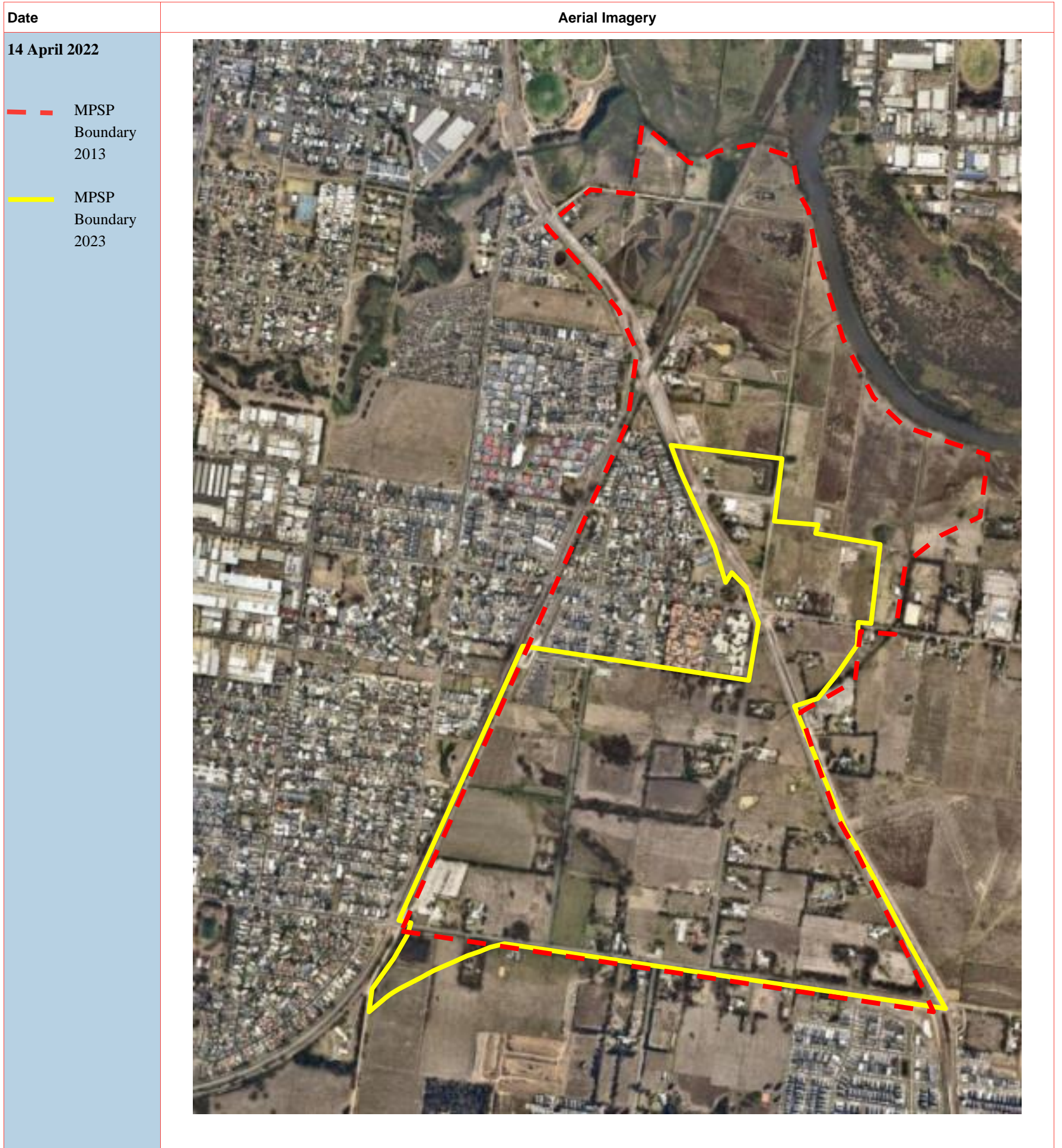


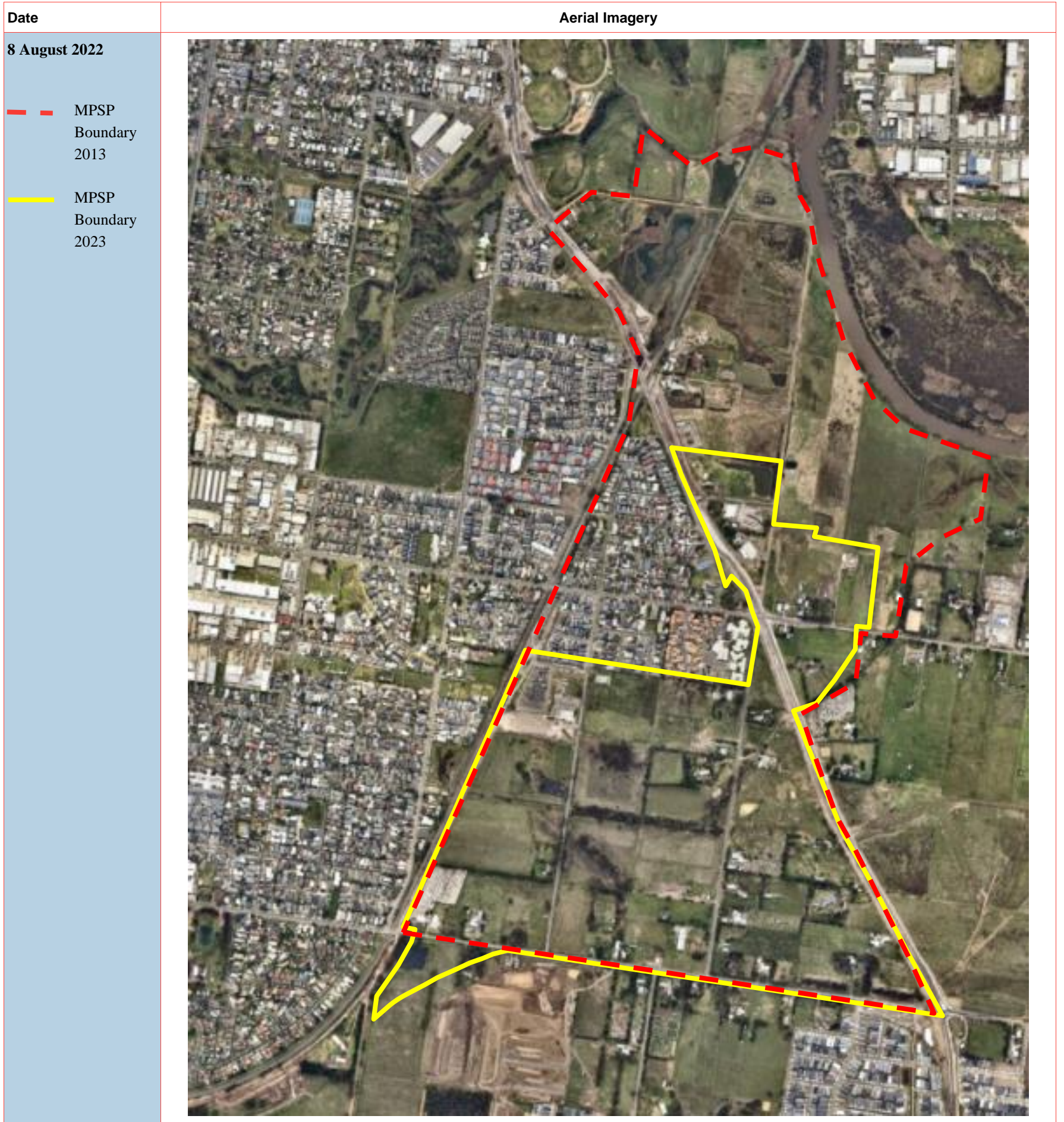


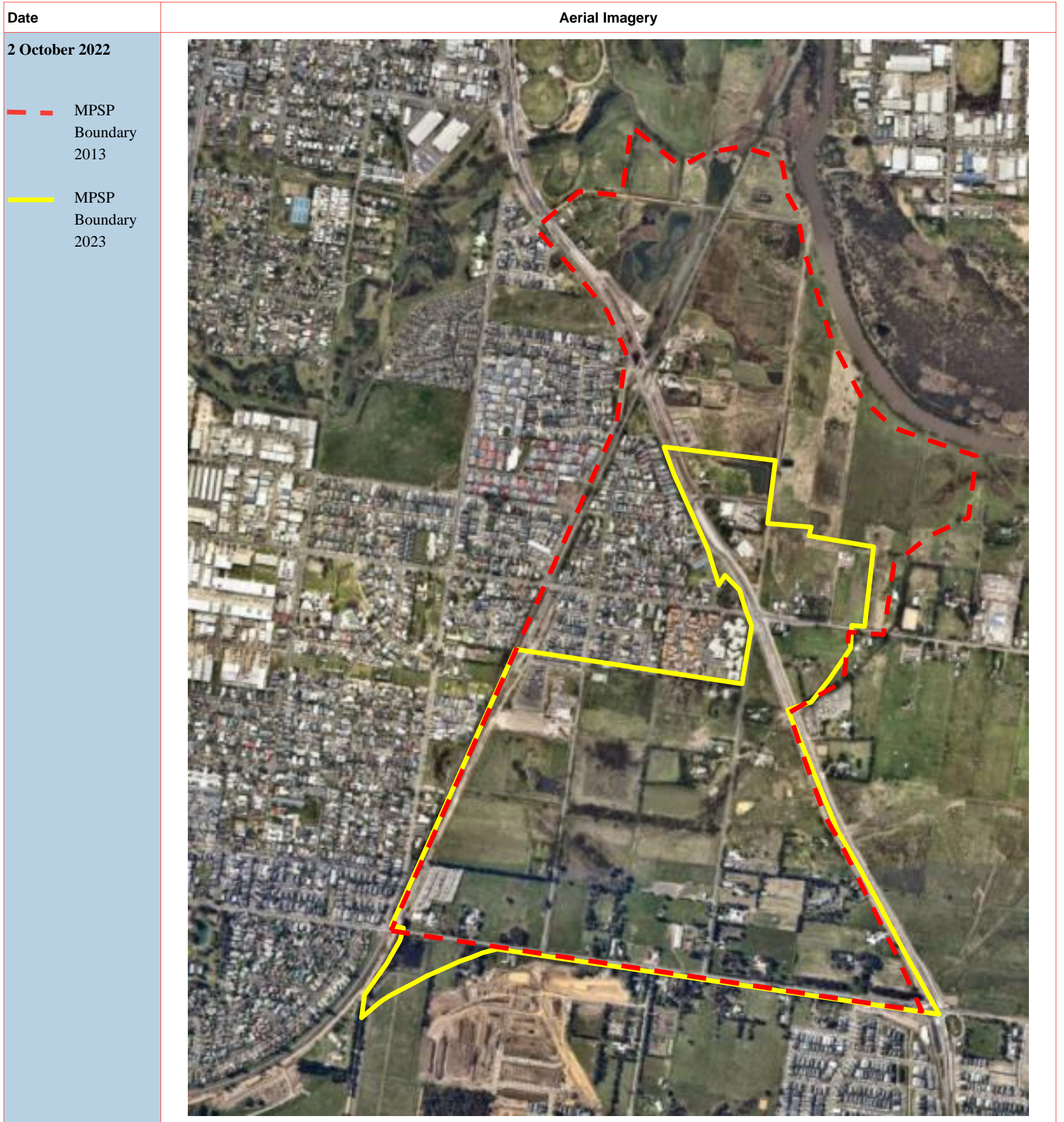


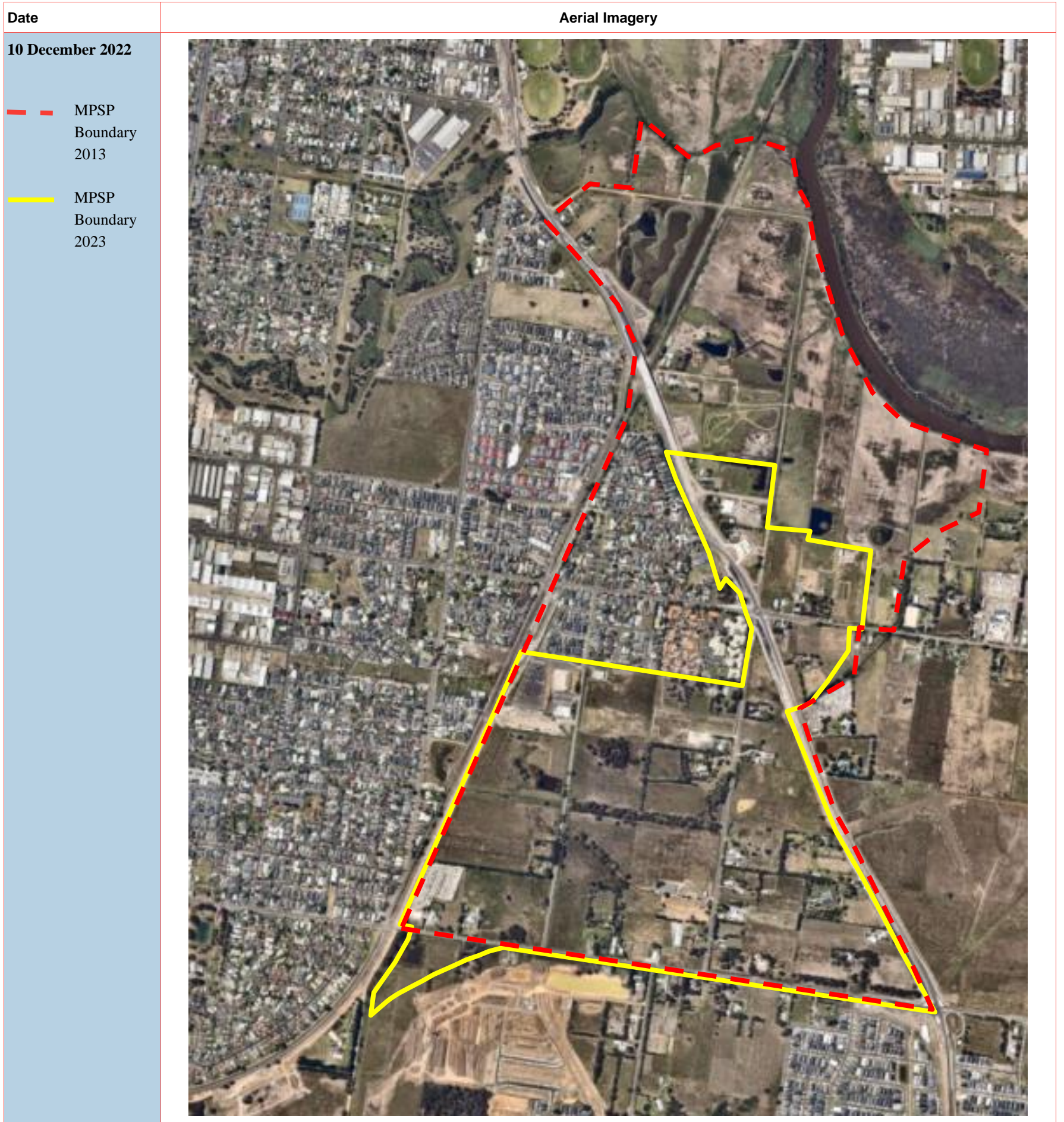


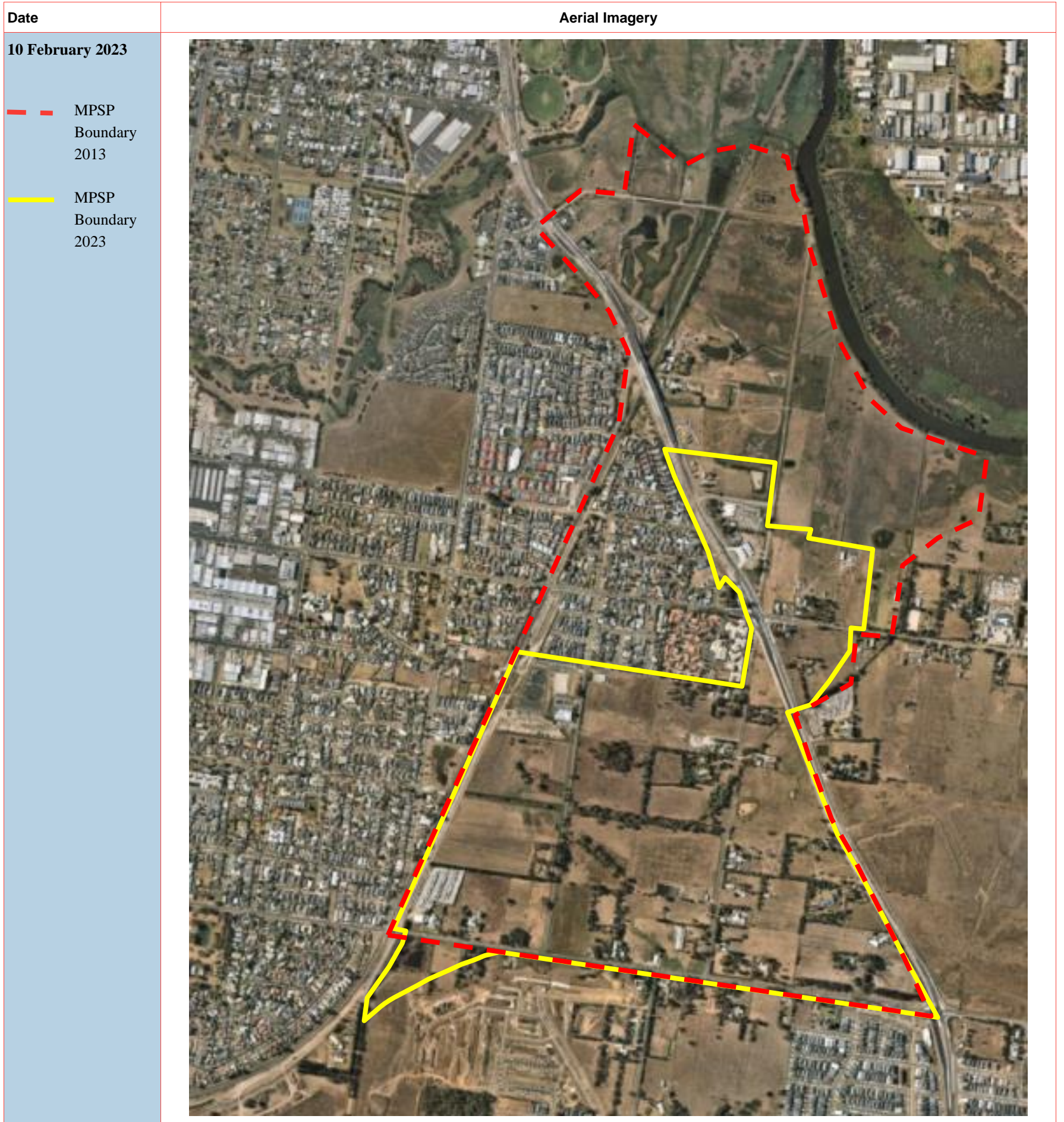


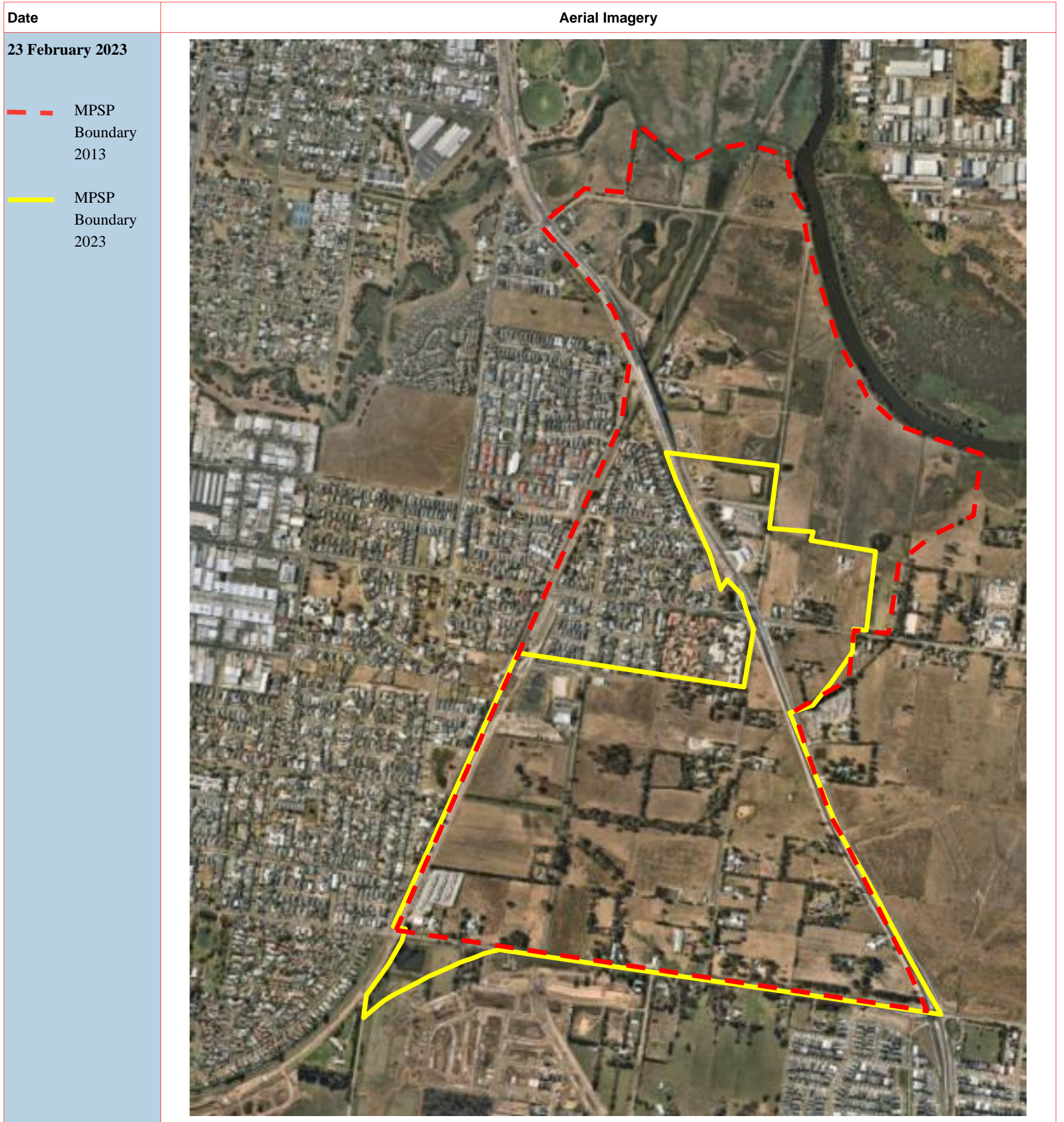


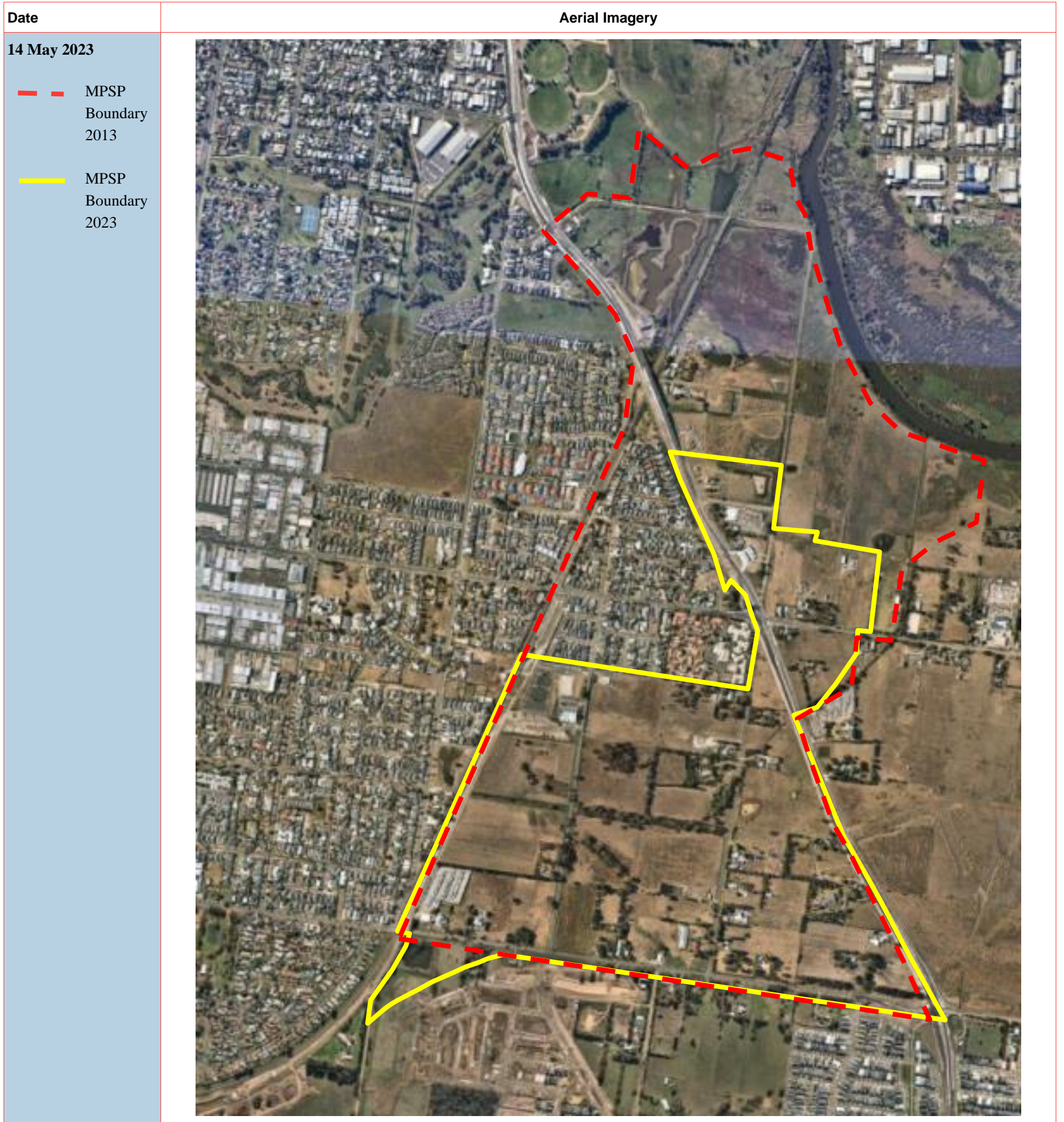














Attachment B
Summary of Historical and Current Contamination
Information

Table B.1 Summary of Historical Contamination Assessment (Updated)

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct							Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	Other uses (i.e., industrial)	
Farming Zone Sub-area																
-	Barwon Heads Road Marshall 3216	TRZ1	Transport	Train line appears to be raised approximately 4 m above. Construction likely to have used imported fill.	Low to medium	Transport	As part of the Victoria’s big Build, 4 km of Barwon Heads Road, between Settlement Road and Reserve Road, was upgraded with construction work undertaken between 2021 to present.	Transport		✓✓	✓✓					Medium potential for contamination – construction work - storage and use of imported fill.
Marshalltown Road Sub-area																
85421 / 2\PS849540	321-329 Barwon Heads Road Charlemont 3217	UGZ	Residential	Appears primarily as a residential dwelling. A number of sheds and houses observed on site. Dam observed in the north west corner. Some rubbish and debris on site.	Low	Residential / swamp	The eastern half of the shed adjacent to Barwon Heads Road demolished/removed sometime between March 2015 and October 2015. The western portion was acquired by the state government as part of the Barwon Heads Road upgrade project. The large shed located at the western portion was demolished by 31 July 2021 and roadway constructed by 10 February 2023. This portion has been assessed as part of Barwon Heads Road and not part of this land parcel. Three shipping containers observed at the north-western portion in the 10 February 2023 imagery.	Residential / swamp	✓	✓	✓✓	✓		✓		Medium potential for contamination – storage and use of imported fill, storage of inert waste. Demolition work – potential for poor waste management during demolition works leading to inert waste being spread into surface soil.

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
85565 / 3\PS849540	331-343 Barwon Heads Road Charlemont 3217	UGZ	Residential	Appears to be primarily used as a residential dwelling. House appears abandoned, old historic ploughs observed, 5 shed on the Horseshoe Bend road, other house on Barwon Heads road. Centre of area appears to be used as garden. Filling activities – train line and roads likely constructed with uncontrolled fill.	Low	Commercial	By 31 July 2021, the western portion along with the residential dwelling and sheds were demolished and redeveloped as part of the Barwon Heads Road upgrade project (extension/duplication of the road) while the remaining area of the property was in the process of development for commercial/industrial purposes (earthworks, lining, shed buildings observed). The portion acquired by state government has been assessed as part of Barwon Heads Road and not part of this land parcel. By October 2021, the land was redeveloped with commercial/industrial sheds/warehouses to the west, parking area to the south and storage/laydown area to the east. Two water tanks and a dam was also observed located at the north-eastern corner. Likely used as a site office / lay down area for the construction of Barwon Heads Road	Residential / commercial		✓✓	✓✓	✓				✓	Medium potential for contamination – Potential storage and use of imported fill, fuel, oil and solvents associated with site office / lay down area.
85564 (1\PS849519 & 2\PS849519)	345 Barwon Heads Road Charlemont 3217	UGZ	Residential / Industrial	House with excavator on site.	Low	Residential	Remains relatively unchanged	Residential / industrial	✓	✓	✓					Medium potential for contamination – Adjacent service station (355 Barwon Heads)	
	355 Barwon Heads Road Charlemont 3217		Residential / Industrial		Low	Service Station	Developed as a service station (7-Eleven) since August 2022	Residential / industrial / service station		✓	✓				✓	High potential for contamination – service station (bulk storage of fuel)	

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
23418 / 5\PS849540	1-5 Tannery Road Charlemont 3217	UGZ	Residential / Industrial	Many sheds and house. Mostly derelict sheds. Appears as a timber cutting area. Sign on corner indicates advertises chainsaw blade sharpening service. Considerable amounts of wooden debris including old stump and timber in the north of the Site, old shed and water tanks spread out across site. Old machinery (trucks) with hydraulic lifts observed	Low to medium (southern half) Low (northern half)	Vacant land	By August 2020, all infrastructure and inert waste previously reported at the property were removed. Property remains vacant to present day.	Vacant land / residential / industrial		✓	✓	✓			✓	Medium potential for contamination – ancillary storage and use fuel, oil, solvents associated with chainsaw blade sharpening and / or possible saw milling operations. Storage of imported fill and inert waste. Adjacent to service station.
43654 / 1\TP958845	11-19 Tannery Road Charlemont 3217	UGZ	Residential / agricultural (low intensity)	Not observed, appears as agricultural.	Low to medium (southern third) Low (northern and central third)	Residential	Some inert waste and small infrastructure observed scattered across the property in the April 2022 imagery. Apart from that, property remained relatively unchanged.	Residential / agricultural (low intensity)	✓			✓				Medium potential for contamination – storage of inert waste.
86212 / 1\TP958789	11-19 Tannery Road Charlemont 3217	UGZ	Residential	Residential, with small agricultural section	Low to medium	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓			✓				Medium potential for contamination – storage of inert waste.
15004 / 1\TP8333	7-9 Tannery Road Charlemont 3217	UGZ	Residential	Residential	Low to medium	Residential	Inert waste stored at the northern boundary. Imported fill used for ground leveling and landscaping purposes.	Residential	✓		✓	✓				Medium potential for contamination – storage and use of imported fill, storage of inert waste.

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
86211 / 2\TP958789	21-29 Tannery Road Charlemont 3217	UGZ	Residential / commercial (sawmilling) / agricultural (low intensity – grazing)	Agricultural: appears to be used for livestock (horses).	Low to medium (north-western corner) Low (remainder of site)	Agricultural (hobby farm)	Soil stockpiles observed in the 27 January 2014 and 6 October 2021 imagery. Inert waste, horse carriage and horse trailers observed stored at the north-western corner of the property. The main sheds were removed by 5 January 2023 and replaced by new shed areas. Based on observation, property predominately grassed with infrastructure (small – medium size sheds) and storage of inert waste at the north-western portion.	Residential / agricultural (low intensity – grazing, hobby farm) / commercial (sawmilling) /			✓	✓	✓✓			Medium potential for contamination – storage of imported fill and inert waste.
79152 / 7\PS849540	8 Tannery Road	UGZ	Residential	Eastern section: block used for residential purposes. Central section: paddock, Western section: 2 residential dwellings, some containers at the rear of west building.	Low	Residential / agricultural (low intensity)	Land along the western portion which includes the residential property and associated shed was acquired by the state government as part of the Barwon Heads Road upgrade project (extension/duplication of the road). Existing infrastructure demolished by October 2021. This portion has been assessed as part of Barwon Heads Road and note part of this land parcel. Rest of property remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓	✓	✓		✓			Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
85566 / 8\PS849540	391-399 Barwon Heads Road Charlemont 3217	UGZ	Residential / Industrial	1 house and sheds. Observed as mostly residential with some agricultural land. Sign observed in front garden reads “Screen Top Soil: Ph XXXX XXXX Delivery available”. Indicating that the occupier of land sells fill materials Commercial activities – soil supplier (soil screening).	Low to medium	Residential / commercial/industrial (soil screening/soil supplier)	Inert waste (possibly timber) and soil stockpiles observed at the property. Size of operation (i.e., medium) likely indicate that soil stockpiling is for landscaping purposes and not remediation of soil for re-use which involves the use of chemicals. Land along the western perimeter was acquired by the state government and redeveloped as part of the Barwon Heads Road upgrade project sometime between November 2022 and February 2023. This portion has been assessed as part of Barwon Heads Road and not part of this land parcel.	Residential / commercial/industrial (soil screening)	✓✓		✓	✓✓			✓	Medium potential for contamination – storage/use of imported fill and storage of inert waste. Soil supplier.
Barwon Heads Road South Sub-area																
8240 / 1\PS906870	25 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Primarily residential with dwelling and shed in south of allotment. Paddock in the north observed with small 3x3 m area of fill	Low	Residential / agricultural (low intensity)	A small infrastructure (possibly a signboard) observed at the northern corner of allotment between October 2015 and April 2022, and removed by August 2022. Apart from that, the property remains relatively unchanged. An open drain runs through the south-eastern corner of property.	Residential / agricultural (low intensity)	✓✓		✓	✓				Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
8241 / 2\TP958846	27-39 Horseshoe Bend Road Marshall 3216	UGZ	Residential	Primarily residential. Dwelling and sheds	Low	Residential	A small infrastructure (likely an advertisement board) observed at the centre of the eastern perimeter between March 2021 and April 2022, and removed by August 2022. Apart from that the property remains relatively unchanged. An open drain runs through the property from south-west to north-east.		✓✓								Low potential for contamination
8416 / 1\TP943622	422-430 Barwon Heads Road Marshall 3216	UGZ	Residential	Primarily residential. Dwelling and sheds	Low	Vacant land	Stockpiles of inert waste and unused cars observed at various locations across the eastern portion where the residential dwelling is located. By 28 March 2020 the property was vacant land with all existing infrastructure were demolished and removed. An open drain runs through the north-western corner of property.	Residential, vacant land	✓✓			✓					Medium potential for contamination – storage of inert waste
8417 / 2\TP943622	432-442 Barwon Heads Road Marshall 3216	UGZ	Residential	Primarily residential. Dwelling and sheds	Low	Vacant land	Large stockpile of inert waste observed west of the residential property (eastern portion) and some along the northern perimeter. By 18 November 2018, most of the infrastructure and trees at the eastern portion have been demolished and removed (with evidence of a house fire), and by 20 December 2019 the property was observed to be vacant land.	Residential, vacant land	✓✓	✓		✓					Medium potential for contamination – storage of inert waste. Demolition work – poor management leading to ACM being spread into surface soil. Adjacent to property undertaking car wrecking operations (#8418)

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
8418 / 3\TP943622	61-69 Horseshoe Bend Road Marshall 3216	UGZ	Residential	Primarily residential (dwelling and sheds) with substantial amounts of debris (mostly rusting chassis). Poor management activities – car bodies, likely fuel and chemical storage	Low to medium	Residential / commercial/industrial	Remains relatively unchanged. Large quantities of motor vehicles and inert waste observed stored at the property. Likely operating as a car wrecker.	Residential / commercial/industrial (car wrecker)	✓✓		✓	✓✓			✓✓	Medium potential for contamination – storage of inert waste. car wrecker operations (fuel and chemicals and motor vehicles (fuel, motor oil, coolant, solvent)
8454 / 4\TP943622	444 Barwon Heads Road Marshall 316	UGZ	Residential	Primarily residential; 1 large shed on site and 1 caravan. Livestock observed grazing	Low	Residential	Some inert waste observed at the central portion of the property. Apart from that the property remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓			✓				Medium potential for contamination – some inert waste evident. Adjacent to property undertaking car wrecking operations (#8418)
8107 / 5\TP943622	450-454 Barwon Heads Road Marshall 3216	UGZ	Residential	Primarily residential (dwelling and sheds).	Low	Residential	Some stockpiles of inert waste observed at various locations across the property. Apart from that, property remains relatively unchanged	Residential	✓✓	✓	✓✓	✓				Medium potential for contamination – some inert waste evident. Adjacent to property undertaking car wrecking operations (#8418)
8419 / 1\TP19665	71-79 Horseshoe Bend Road Marshall 3216	UGZ	Residential	Dwelling and sheds. Limited observations due to fencing; satellite imagery shows dwelling with sheds in paddock.	Low	Residential	Possible minor amounts of inert waste at various locations across the property . Stockpile first observed at the central portion in the November 2014 imagery., however it is likely to be a tree waste (for a bonfire). Apart from that, rest of property remains relatively unchanged.	Residential	✓✓		✓✓	✓✓				Medium potential for contamination – minor storage of inert waste. Adjacent to property undertaking car wrecking operations (#8418)
8108 / 1\TP944760	456-468 Barwon Heads Road Marshall 3216	UGZ	Residential	Primarily residential (dwelling and sheds).	Low	Residential	Remains relatively unchanged.	Residential	✓✓							Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
8420 / 1\TP945957	81-89 Horseshoe Bend Road Marshall 3216	UGZ	Residential	Infrastructure included a dwelling and sheds (large). Old machinery observed, IBC's and old machinery, old tanks, metal debris. Land appears to be used for some activity ancillary to primary production, indicated by the size of the large shed. Large stockpile observed at rear at eastern boundary.	Low	Residential	Three shipping containers first observed at the eastern portion in the January 2021 imagery and removed by 10 December 2022. Apart from that, property remains relatively unchanged.	Residential	✓✓		✓✓	✓✓			✓	Medium potential for contamination – possible storage and use of fuel, lubricants, chemicals, and storage of imported fill and inert waste.
8109 / 12\PS849540	470-480 Barwon Heads Road Marshall 3216	UGZ	Residential	Primary residential (dwelling and sheds). Numerous old rusted car bodies observed.	Low	Residential / commercial	Stockpiles of inert waste observed south of large shed. Apart from that, property remains relatively unchanged.	Residential / commercial	✓✓			✓			✓	Medium potential for contamination – possible storage and use of fuel, lubricants, chemicals, and storage of inert waste.
8074 / 1\TP958866	91-99 Horseshoe Bend Marshall 3216	UGZ	Residential / agricultural (low intensity)	Dwelling and sheds. Limited observations due to fencing. Sign observed at front – read “hygain – horse supplement”	Low	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓							Low potential for contamination
8361 / 13\PS849540	205-243 Reserve Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Dwelling and sheds. Stock loading ramp in south west corner of site (no sheep dip observed), some feeding areas in south (old bath).	Low	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓							Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
8075 / 1\TP958865	181-203 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural	Western section: only trees observed, on raised ground. House area (central and eastern): sign observed – manure for sale and ‘panel beating, spray painting and body work’ inferred home business.	Low	Residential	Remains relatively unchanged.	Residential / agricultural / commercial/industrial	✓✓	✓					✓	Medium potential for contamination – Possible minor storage and use of fuel, spray paint, lubricants, solvents.
Drews Road Sub-area																
116228 / 2\PS631720	40-60 Drews Road Marshall 3216	TRZ1	Public – Train Station	Half the area appears to be used as a car park for the train station. Half appears as an unused paddock. Area on the southern boundary appears approximately 1.5 m higher than remainder off site. Likely area of fill.	Low to medium (southern portion) Low (northern and central portion)	Public – Train Station	By September 2018, the roadway and walkway along the northern boundary was observed to be paved in asphalt or concrete, while the car park has extended further east and paved in gravelly hardstand. By August 2022, the remainder of the property (southern portion) was in the process of being developed with construction and earthwork observed. By December 2022, several portable site offices and associated carpark was developed at the south-eastern portion while the remainder of the land along the southern boundary was cleared and used for parking (cars and trucks) and storage (soil stockpiles, equipment) purposes. Google street view indicated that the area was used as a construction site office and layout yard.	Public – Train Station		✓✓	✓✓				✓✓	Medium potential for contamination – Construction site office and laydown yard - possible minor storage and use of fuel, solvents, and imported fill.

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)	
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)
34635 / 3\PS631720	62-84 Drews Road Marshall 3216	UGZ	Agricultural (low intensity)	Open paddock, eastern section is raised higher than rest of the site; wooden debris in some locations between tree (natural); swampy area to south of paddock. Filling activities – mound raised by approximately 2 m relative to ground level.	Low	Agricultural (low intensity)	Remains relatively unchanged.	Agricultural (low intensity)		✓	✓		✓✓			Medium potential for contamination – use of imported fill
79436 / A\PS528440	35 Drews Road Marshall 3216	UGZ	Agricultural (low intensity) / industrial	One building (built by December 2011) within observed in the north west corner (individually fenced off with chain link and barbed wire, stock yards in south west corner (size indicates cattle stock yards, no sheep dip observed), concrete riser on eastern boundary possibly indicates potential sewer.	Low	Commercial/ industrial	From street view, the building appears to be a large commercial/industrial shed potential used as a workshop and storage purposes. Remains relatively unchanged.	Agricultural (low intensity), commercial/industrial		✓	✓		✓		✓✓	Medium potential for contamination – Commercial/industrial operations (fuel, solvents and other chemicals)
84969 / 11~2\PP2421	67-87 Drews Road Marshall 3216	UGZ	Agricultural (low intensity) (environmental significance overlay)	No notable observations	Low	Vacant land	Remains relatively unchanged.	Vacant land / agricultural (low intensity) (environmental significance overlay)					✓			Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
79154 / 1\PS833028 & 2\PS833028	12-14 & 16-20 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. No notable observations	Low	Residential	The large shed previously located south-west of the residential building observed to be relocated to the south of the residential building. Apart from that the property remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓								Low potential for contamination
79155 / 2\LP86080	22-30 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. Land appears as paddock with small residence. Large excavator observed on western side of paddock with (new) stockpiles of soil observed.	Low	Residential / agricultural (low intensity)	By 29 October 2015, the ground behind the buildings (forming the south-eastern portion) was paved in permeable gravelly hardstand and used for parking and storage (equipment, inert waste, soil stockpiles) purposes. Stockpiles of soil were also observed stored at the south-western portion.	Residential / agricultural (low intensity)	✓✓	✓	✓✓	✓					Medium potential for contamination – Numerous stockpiles have been noted. Storage of inert waste.
78633 / 12~2\PP2421	32-60 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Drainage system observed running out of property in a north easterly direction. Property observed as primarily residential (1 house and sheds).	Low	Residential	Remains relatively unchanged.	Residential / low intensity (low intensity)	✓✓								Low potential for contamination
84997 / 2\TP918723	86-104 Drews Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Open paddock, no notable observations.	Low	Vacant land	Remains relatively unchanged.	Residential / agricultural (low intensity) / vacant land					✓				Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
8635 / 1\TP918723	86-104 Drews Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Dwelling and sheds are observed in the western section of the allotment. Stockyard/loading area of cattle existed near house (no sheep dip observed). 1 shed is observed with storing vehicle and building materials.	Low	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓								Low potential for contamination
8636 / 1\TP612909	86-104 Drews Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Swampy area distinct from remaining paddock.	Low	Vacant land	Remains relatively unchanged.	Vacant land, residential / agricultural (low intensity)					✓				Low potential for contamination
7225 / 1\TP84691	91-109 Reserve Road Marshall 3216	UGZ	Residential / commercial/ Industrial (caravan storage and automotive)	1 house, parking area for mobile caravans. Site observed with caravans, horse float, bobcat observed on site. Additionally horses are observed grazing. Signage on the property indicates that the site is used for boat and caravan storage. Multiple small stockpiles of soil are observed in the north eastern of the site. Commercial activities – storage and possibility automotive.	Low to medium	Commercial (caravan storage centre)	Grovedale Caravan Storage Centre. The parking area occupying the western half of the property was redeveloped with all vegetation removed and paved in permeable gravel hardstand by November 2014. By 28 August 2020, the carpark area was expanded out towards the eastern boundary. Stockpiles of soil and inert waste observed at various locations across the site.	Residential/ Commercial (caravan storage centre and automotive)		✓✓	✓✓	✓✓			✓✓		Medium potential for contamination – Possible storage of fuel, oil, solvents, lubricants. Numerous stockpiles noted.

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
8363 / CP169831	113-129 Reserve Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. Open paddock with horse grazing; small soil stockpiles in the south east corner, along with water trough and inferred feeding area. Some debris observed in the north section.	Low	Residential	A lunging ring associated with horse training (north of residential building) first observed in the 28 October 2016 imagery. Apart from that the property remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓	✓	✓						Low potential for contamination
8604 / 14~2\PP2421	89-109 Drews Road Marshall 3216	UGZ	Residential / agricultural (low intensity) (environmental significance overlay)	No notable observations.	Low	Vacant land	Remains relatively unchanged.	Residential / agricultural (low intensity) / vacant land (environmental significance overlay)		✓	✓						Low potential for contamination
8460 / 13~2\PP2421	62-80 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	Site observed as an open paddock with waste debris in multiple locations and stockyard (no sheep dip observed).	Low	Commercial (nursery)	Stockpiles of soil and inert waste observed along the southern boundary of the property were removed by 28 October 2016. More soil stockpiles were observed between 2021 to present day. A commercial building developed at the south-eastern portion by 29 October 2017. Property was developed for commercial (nursery) land use by December 2022.	Residential / agricultural / commercial (nursery)		✓✓	✓✓	✓	✓				Medium potential for contamination – nursery (use of chemicals including pesticides, herbicides, fungicides).
8603 / 1\TP618413	135-153 Reserve Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. Mostly agricultural, with building and shed in one corner.	Low	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓								Low potential for contamination

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
8359 / 1\TP539750	155 Reserve Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. Mostly obscured, satellite imagery shows paddock and residence.	Low	Residential	Remains relatively unchanged.	Residential / agricultural (low intensity)	✓✓								Low potential for contamination
8459 / 1\TP6652	82-90 Horseshoe bend Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. Shed observed with graffiti 'marshall automotive customs', automotive parts observed on ground. Indicating low intensity of automotive works.	Low	Residential / agricultural (low intensity) / commercial (automotive)	Minor stockpiles of inert waste observed stored at various locations across the property. By March 2015, all existing onsite buildings were demolished and removed. By October 2015, a shed and shipping container were present at the centre of the southern boundary.	Residential / agricultural (low intensity)/ commercial (automotive)	✓✓			✓✓			✓✓		Medium potential for contamination – possible minor storage and use of fuel, lubricants, chemicals, and storage of inert waste..
8637 / 1\TP841695	92-108 Horseshoe Bend Road Marshall 3216	UGZ	Residential / agricultural	1 house and sheds. Mostly agricultural, with manure for sale. Size of shed indicate some process (possible agricultural), horse grazing, building on Horseshoe Bend Road observed with HAZCHEM sign.	Low to medium (north-eastern corner) Low (remaining area)	Residential / commercial/industrial	Stockpiles of inert waste stored at the front (east) and side (north) of large shed observed throughout the years. Apart from that, property remains relatively unchanged.	Residential / agricultural / commercial / industrial	✓✓	✓	✓✓	✓			✓✓		High potential for contamination – storage and use of hazardous chemicals.
8600 / 1\TP967383	157-159 Reserve Road Marshall 3216	UGZ	Residential	1 house and sheds. No notable observations.	Low	Residential	Minor storage of inert waste observed east of the residential building observed throughout the years. Apart from that, the property remains relatively unchanged.	Residential	✓✓		✓	✓					Medium potential for contamination – storage and use of imported frill and storage of inert waste.
8599 / 1\TP947680	161-167 Reserve Road Marshall 3216	UGZ	Residential / agricultural (low intensity)	1 house and sheds. No notable observations, small area observed with livestock.	Low	Residential	Stockpiles of soil and inert waste observed throughout the years.	Residential / agricultural (low intensity)	✓✓		✓	✓					Medium potential for contamination – evidence of small stockpiles of soil and inert waste

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)		
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp		Other uses (i.e., industrial)	
Additional land parcels added in 2023 MPSP																	
A\PS838517	86-100 Reserve Road Charlemont 3217 (northern half) (VicPlan)	UGZ	N/A	N/A	N/A	Agricultural (market garden)	Property observed to be operating as a market garden (rows of crops) since at least November 2009 (with most of the area occupied by a dam). Prior to this the property was observed to be vacant grassed land likely used for agricultural purposes (low intensity – grazing) (based on aerials provided in 2013 PEA).	Agricultural (market garden)						✓			Medium potential for contamination* – Possible use of pesticides, herbicides, fungicides and other chemicals associated with agricultural operations.
C\PS838479	110 Reserve Road Charlemont 3217	UGZ	N/A	N/A	N/A	Vacant land	Property previously formed part of the north-western corner of residential property (130 Reserve Road, Charlemont 3217) and used as a driveway and for agricultural (grazing) purposes.	Residential / agricultural (low intensity – grazing) / vacant land						✓			Low potential for contamination*
-	Nature strip and driveway at the corner of Tamala Avenue and Barwon Heads Road	TRZ2	N/A	N/A	N/A	Under construction	Nature strip and driveway front property 344 and 346 Barwon Heads Road and 3 Field Court Road. By February 2023, the area was redeveloped as part of the Barwon Heads Road upgrade project (expansion/duplication of the Road).			✓	✓						Medium potential for contamination* – Area subject to recent construction work, and the use of imported fill.
Land Parcels excluded from 2023 MPSP																	
19699 / 84-\PP2421	25-39 Woolscour Lane Marshall 3216	FZ	Residential / industrial	Property was observed without any buildings or infrastructure. Stockpile of soil observed in the south-west corner.	Low	Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)											

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	
19805 / 84-2\PP2421	25-39 Woolscour Lane Marshall 3216	FZ	Residential / industrial	Surface raised approximately 0.3 m above road. Wooden stakes observed in the ground, potentially indicating development. Garden patched observed on the western boundary of the allotment.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19804 / 586-2\PP2421	55-75 Woolscour Lane Marshall 3216	FZ	Agricultural (low intensity) / industrial	1 shed, 1 shipping container and 1 IBC. Some agricultural infrastructure observed. Earth disturbance observed.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19790 / 1\TP954639	77-107 Woolscour Lane Charlemont 3217	FZ, TRZ1	Un-used, swamp land	Un-used swamp area, bound by train line	Low to medium			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
84930 / 1\TP942048	77-107 Woolscour Lane Charlemont 3217	FZ, TRZ1	Un-used, swamp land	Un-used swamp area, bound by train line	Low to medium			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19789 / T\TP959152	77-107 Woolscour Lane Charlemont 3217	FZ, TRZ1	Agricultural (low intensity) and recreational	Two concrete pads in south section, indicating former buildings. Tin cladding and other rubbish on site. A significant amount of soil is observed as having been landscaped to create motocross track.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19788 / 1\TP954636 & Allot 2 Sec 2B (pt)	77-107 Woolscour Lane Charlemont 3217	FZ, TRZ1	Agricultural (low intensity) and recreational	site. A significant amount of soil is observed as having been landscaped to create motocross track.	Low to medium			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	
19787 / TP585025	77-107 Woolscour Lane Charlemont 3217	FZ	Agricultural (low intensity) / recreational	Gravel fill observed on Site.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
84964 / 4\PS913573	239-241 Barwon Heads Road Marshall 3216	FZ	Residential / agricultural (low intensity)	Land parcels identified as a hobby farm. Eastern section used as a paddock with structures in the west.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
80601 / PS913573	2-12 Woolscour Lane Marshall 3216	FZ	Residential / agricultural (low intensity)	Eastern Section: Paddock with depression in centre, bricks (as debris) observed in the centre of the depression.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
80151 / 6\PS913573	14-24 Woolscour Lane Marshall 3216	FZ	Residential / agricultural (low intensity)	Western Section: 1 large shed with some farming machinery observed. Small stockpile of soil observed (newly placed fill) behind shed	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
80152 / 7\PS913573	26 Woolscour Lane Marshall 3216	FZ	Residential / agricultural (low intensity)	Observed as mostly farm land, with large (~75 m ³) stockpile of soil in the northern section. Residential dwelling in south. Swamp area – possible filling.	Low to medium			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
84919 / 3\PS913573	243-251 Barwon Heads Road Marshall 3216	FZ	Residential / agricultural (low intensity)	Mostly swamp	Low to medium			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
84918 / 2\PS913573	253-261 Barwon Heads Road Marshall 3216	FZ	Agricultural (low intensity)												

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	
83823 / 7\TP236326	5-41 Norcott Road Charlemont 3217	FZ	Residential / agricultural and industrial (used for natural fertiliser production)	Western Section: Used as a natural fertiliser farm. Observed with a number of silos, houses, and shed. Machinery observed on site.	Low to medium	Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)									
83822 / 2\TP236326	5-41 Norcott Road Charlemont 3217			Central and eastern Section: considerable earthworks have been undertaken on site, dams on site, excavator observed, considerable amount of old car chassis general rubbish and debris.	Low to medium										Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)
85216 / 3\TP236326	5-41 Norcott Road Charlemont 3217			Infrastructure and operations associated with commercial activities – natural fertiliser production located at #83823 and #83822	Low										
20005 / 1\TP236326	5-41 Norcott Road Charlemont 3217	FZ	Agricultural (low intensity)	Structures related to grazing (water trough). Some feeding areas and bee hives in paddock, drain along Horseshoe bend road, approximately 0.7 m deep.	Low	Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)									
85563 / 1\PS849540	281-319 Barwon Heads Road Charlemont 3217	FZ	Residential / Agricultural and Industrial (used for	Mostly agricultural land with a house, shed, building debris, old shipping containers, fill	Low to medium	Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)									

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	
85422 / 70~2\PP2421	45 Horseshoe Bend Road Charlemont 3217		natural fertiliser)	stockpiled, old vegetable and fruit pallets, septic tank observed in the north west corner. Appears to be part of the natural fertiliser farm. High density of old rusted car chassis.				Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19971 / 1\TP802432	45 Horseshoe Bend Road Charlemont 3217	FZ	Agricultural (low intensity)	Paddock used for grazing with water trough structure. A number of areas used for to provide livestock with drinking water/feeding. Water channel and a number of dams on site.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19664 / 1\TP958845	11-19 Tannery Road Charlemont 3217	FZ, GRZ	Agricultural (low intensity)	Appears as paddock used for grazing with water trough structure. Open space.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19663 / 2\TP958845	31-39 Tannery Road Charlemont 3217	FZ	Agricultural (low intensity)	Appears as paddock used for grazing with water trough structure. Open space, lot of reeds indicates swampy area. Shed and tractor observed in distance.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							
19662 / 2\LP114328	81-89 Tannery Road Charlemont 3217 (north-western portion)	FZ	Agricultural (low intensity)	Appears as paddock used for grazing with water trough structure. Open space, lot of reeds indicates swampy area. Shed and tractor observed in distance.	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							

Sub Precinct (2013 PEA ID#) / Land Parcel	Address	Zone	2013			2023		Summary of known current and former land uses	Known former and current uses and activities present in sub-precinct						Risk Rating (PPN30 – DEWLP 2021)
			Land Use	Observations/findings	Risk Rating (PPN30 - DSE 2005)	Current Land Use	Aerial imagery observations September 2013 - June 2023		Primarily residential	Earth disturbance	Stockpiles of soil / Imported fill	Solid inert waste observed on site	Primarily Agricultural	Swamp	
86210 / 1\LP114328	41-49 Tannery Road Charlemont 3217 (north-western corner)	FZ	Agricultural (low intensity)	Fire damaged house – sign on property read “expression of interest invited – fire damaged house...with planning permit.” Water trough observed onsite	Low			Not considered further in context of 2023 MPSP and PPN30 (DEWLP, 2021)							

Note:

* New land parcel added to the 2013 Marshall Precinct Structure Plan. **Low reliability**, land use was based on observations from available aerial images. No drive-by survey nor desktop review was undertaken for these properties.

✓ Observations and findings made in 2013 assessment work

✓ Observations made in 2023 assessment work

N/A - Information not available

Attachment C
Proposed Marshall Precinct
Planning Structure

C.1 Proposed Marshall Precinct Structure Plan



KEY

The Future Urban Structure Plan sets out the land uses and primary street network of the precinct.

CONTEXT

- Precinct Boundary
- Existing trees to be retained
- Railway and Station
- Flood Overlay
- Electrical Transmission Tower
- Station Carpark
- Property Boundary

LAND USE

- Conventional Residential
- Medium/High Density Residential
- Mixed Use - High Density Residential
- Road Reserve
- Commercial/Bulky Goods
- Credited (Unencumbered) Open Space
- Conservation Reserve
- Utilities Easements
- Drainage Reserve
- Constructed Waterway (Marshall Creek)

MOVEMENT

- Arterial Road
- Connector Street
- Connector Street (Modified)
- Local Access Street
- Station Precinct Road (Refer to Concept Plan)
- Local Access Street (No through Road)
- Road Truncation
- Major Road Project
- Signaled Crossing

Figure 9.1: Future Urban Structure Plan (CGG, 2023)