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Cloncurry Airport Tender Design Report

This Tender Design Report details the basis of, and the requirements for, the pavement upgrades at Cloncurry Airport. Ancillary scope items are also considered. The intention of this report is to provide background information for the tender and design phases of the proposed Design and Construct contractor for the airfield pavement and lighting upgrades at Cloncurry Airport.

Background

Cloncurry Airport is located a few kilometres north of the town of Cloncurry, which is approximately 120 km east of Mount Isa in western Queensland. Cloncurry airport primarily supports FIFO operations with flights from Brisbane, Townsville and Cairns. Regional RPT services also operate into Cloncurry Airport, as well as agriculture-related GA aircraft and the RFDS.

There are two main elements of the Cloncurry airport pavement system. These are:

- FIFO and RPT pavements. These include Runway 12/30, Taxiway A, Taxiway B and the RPT/FIFO apron. Runway 12/30 is 30 m wide and 2,000 m long and has a strength rating of PCN 30/F/A/1200/T. These areas are collectively referred to as the RPT pavements.
- GA pavements. These include Runway 06/24, Taxiway C and the GA parking apron. Runway 06/24 is 18 m wide and 1,157 m long and has a weight limit of 5,700 kg. Runway 06/24 is currently closed due to its poor condition. These areas are collectively referred to as the GA Pavements.

A master plan was prepared in 2023 and considered upgrading both runways. Runway 12/30 was proposed to be strengthened to allow B737/A320 aircraft to operate, although the loss of grandfathering provisions would make widening or lengthening impractical. Runway 06/24 was proposed to be upgraded to allow smaller Code B aircraft to operate, in addition to the current Code A aircraft, freeing up Runway 12/30 for larger aircraft use. A range of issues, including high cost, loss of grandfathering provisions, and a low likelihood of adequate demand to support B737 services, meant that these upgrades would not be viable. A revised project scope was subsequently developed, which focused on resurfacing the existing pavements and installation of a new airfield lighting system. Despite the departure away from upgrades to support regular B737 aircraft, occasional B737 operations at reduced weight may still be considered under Pavement Concession, on a case-by-case basis.

Existing pavement structures

The master plan report included a limited geotechnical investigation. Because the pavements were pre-determined by the master planners to require full depth reconstruction, this focused on subgrade characterisation for design purposes. However, with the scope revised to retention and resurfacing of the existing pavements, the existing pavement structures became more import. Consequently, a supplementary geotechnical investigation was performed by JK Geotechnics in December 2023, as detailed in their report dated 29 February 2024. The investigation included:

- 14 test locations on Runway 12/30.
- 2 test locations on each of Taxiway A and Taxiway B.
- 6 test locations on the FIFO and RPT apron.
- 10 test locations on Runway 06/24.
- 4 test locations on the GA parking apron.
- 4 test locations in the undeveloped area of the proposed hangar complex.

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The scope of the testing included:

- Logging of existing pavement thickness depths and material types.
- DCP testing and estimation of the prevailing (insitu) subgrade bearing capacity.
- Sampling of pavement layers for laboratory grading, plasticity and shrinkage potential.
- Sampling of underlying subgrade materials for soaked CBR testing.

A summary of the test results is in Appendix 1, excluding the four test pits in the future hangar development location. Appendix 1 also excludes test location L1 because it was inadvertently located on the extended runway centreline of Runway 06/24, in what is currently the underrun area, so it is not located within the existing pavement footprint. From the existing pavement geotechnical investigation it was determined that:

- The pavement thicknesses and compositions are highly variable, with the RPT pavements ranging in thickness from about 300 mm to about 1,100 mm.
- The laboratory testing of the subgrade was also highly variable, with reported bearing capacities of CBR 2 to CBR 18, although there was one CBR 60, which was either not truly the subgrade material or was an error.
- The prevailing subgrade condition (inferred from DCP testing) is better than the laboratory soaked testing, with many of the prevailing subgrade bearing capacity values in the range CBR 6 to CBR 8, compared to most of the soaked laboratory values in the range CBR 2 to CBR 4. This likely reflects the drier nature of the subgrade under the sealed pavement.

Based on the above, the existing pavement structures were characterised as:

- RPT pavements (Runway 12/30, Taxiway A, Taxiway B and main apron)
  - 40 mm bituminous surface, primarily a microsurfacing over old sprayed seals.
  - 300 mm higher quality crushed rock base.
  - Reactive clay subgrade.
- GA pavements (Runway 06/24, GA apron and Taxiway C)
  - 30 mm bituminous surface.
  - 220 mm low quality natural gravel.
  - Reactive clay subgrade.

Based on the subgrade testing from across the site, including the laboratory CBR test results for the four pits in the area of proposed hangar sites, new pavements should be designed on the basis of a low bearing capacity reactive clay subgrade of natural (ie. untreated) bearing capacity less than CBR 3. A higher CBR is potentially acceptable following a stabilisation treatment of the upper portion of the clay subgrade.

Existing airfield layout

A full engineering survey was performed by Paveset Australia in September 2024. The survey included all pavement edges, line marking, airfield lighting and other infrastructure, as well as a surface levels on a grid suitable for airport pavement reconstruction or asphalt resurfacing. The existing airfield survey plans are included in Appendix 2.

Existing pavement condition

The pavements at Cloncurry Airport were inspected on 2 May 2024 and again on 10 September 2024. Demonstrative photographs from the inspection are included in Appendix 3.

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Runway 12/30 is in sound structural condition, with no visually identifiable distress to suggest that the current aircraft loadings exceed the strength of the existing pavement structure. The runway also appears to be well shaped, with a generally central crown and a reasonable, albeit variable, crossfall (Photograph 1). The surface appears to be a small sized micro-surfacing (Photograph 2) and in isolated areas where the surface was lost, it was clear that it was thin, less than 5 mm in thickness (Photograph 3). The underlying material appeared to be an older sprayed seal constructed using crushed local river cobbles. The surface exhibited a range of distresses, which are all expected and normal for a surface approaching the end of its serviceable life, including:

- Age cracking (Photograph 4) a normal occurrence in aged bituminous pavement surfaces.
- Tack coat bleeding (Photograph 5) likely caused by moisture pushing up through the surface.
- Roller shove cracking (Photograph 6) likely occurring during construction.
- Edge cracking (Photograph 7) from moisture fluctuations in the adjacent unpaved flanks.

Only moderate rubber contamination was observed in the touch down zones (Photograph 8).

The shoulders to Runway 12/30 were similarly sound and appear to have a sprayed seal surface (Photograph 9). The runway end blast areas were also sound, with a larger stone sized sprayed seal surface (Photograph 10).

Taxiway A and the RPT apron pavement all appear similar and are also free of visually identifiable structural distress (Photograph 11). It is understood that these pavements were upgraded and surfaced in 2015 and the sprayed seal is now due for a subsequent resurfacing, either in asphalt or another seal (Photograph 12). Otherwise, the apron is in good condition, although it has been reported that the apron is uneven, which should be corrected as part of the resurfacing.

Overall, the RPT pavements are structurally sound and unless a significant increase in aircraft traffic loading is expected in the future, resurfacing is all that is required. That is, none of the RPT pavements require any significant rehabilitation or strengthening for the current aircraft types.

Runway 06/24 appears to have been reduced in width from the original 45 m to 30 m and then further reduced to 18 m, per the current ERSA, but with a newer sprayed seal surface approximately 20 m wide (Photograph 13). The surface is in poor condition with significant loss of stone from the sprayed seal (Photograph 14), extensive age-related cracking (Photograph 15) and isolated areas of break-up, where vegetation has grown through the surface (Photograph 16). However, the pavement is free from visual signs of structural distress and is therefore considered to be structurally adequate for the light aircraft that it serves.

Taxiway C and the GA apron are also structurally sound (Photograph 17) although the surfaces are old and resurfacing is required (Photograph 18).

Overall, the GA pavements are structurally sound, but the surface of Runway 06/24 is severely degraded. The condition of the Runway 06/24 surface is so poor that it is beyond routine resurfacing and the pavement requires partial depth reconstruction to re-form a flat and true base course prior to re-surfacing, either with asphalt or a sprayed seal.

Aircraft traffic loadings

Based on the information included in the master plan reports, the aircraft traffic loadings detailed in the following table were adopted to reflect the continuation of the existing traffic loading scenario for Runway 12/30, Taxiway A, Taxiway B and the apron areas. Smaller GA aircraft were omitted as they are inconsequential for pavements designed for these larger aircraft.

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Aircraft	Weight	Annual departures
Dash 8-Q400	29.3 tonnes	1,523
E190	47.9 tonnes	248
F100	45.8 tonnes	2,000

For the GA pavements, the master plan reports included an upgrade for smaller Code B aircraft, such as the RFDS Kingair 350 B. However, these aircraft generally operate infrequently and although there would be some potential benefit in parking them away from the RPT aircraft, it is unlikely they would use Runway 06/24. Rather, Runway 06/24 would more likely remain a GA runway with a strength limit of 5,700 kg aircraft. However, given this aircraft is only marginally heavier than the current 5,700 kg GA weight rating, it was included in the traffic loadings for these areas.

Aircraft	Weight	Annual departures
King Air B200	5.7 tonnes	714
King Air 350	6.8 tonnes	714

Operational limitations

Runway 06/24 is currently closed due to the poor condition of the surface. There are no operational restrictions in this area and the works can be completed as day works, including any work required to Taxiway C.

Runway 12/30, Taxiway A and Taxiway B are used Monday to Friday by the FIFO and RPT operators and these services can not be interrupted. Consequently, the work to the areas must be completed at night, with the pavements returned to service each day. There may also be some provision for continuous closure over the weekend, and for partial taxiway and/or apron closures.

Pavement concept options

Two previous reports have considered pavement concept options for the two pavement areas. These were:

- Master plan concept design review, prepared by APES Pty Ltd, dated 31 August 2023.
- Pavement concept options development, prepared by APES Pty Ltd, dated 3 May 2024.

The various options considered included:

- Full depth reconstruction.
- Foamed bitumen stabilisation and seal or asphalt overlay.
- Resurfacing by asphalt overlay (RPT Pavements) or reseal (GA pavements).

A range of factors were considered in the pavement concept options development report. The factors that led to the proposed pavement work scopes were:

- All existing pavements being free of symptoms of structure distress.
- The aircraft traffic associated with he RPT and the GA pavement areas not increasing in frequency of severity, with the current E190/F100/Q400 operations continuing for the foreseeable future.
- Operational inability to close the RPT pavements to RPT and FIFO services for any period of time that would reasonably be required for reconstruction.
- The poor condition of the Runway 06/24 preventing simple resurfacing to be undertaken.
- The age and condition of the RPT apron and taxiways following the 2015 rehabilitation.

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Based on the existing pavement structures and condition, the operational considerations listed above, and through consultation with the Councillors and Council staff, it was determined that the pavement work scope would include:

- Runway 12/30. Asphalt resurfacing of the runway. Any strengthening would be ancillary and would not be specifically required or specifically designed for.
- RPT apron and associated taxiways. Resurfacing by asphalt overlay, for consistence with Runway 12/30.
- Runway 06/24 and portion of Taxiway C. Shallow stabilisation of the existing pavement with foamed bitumen and a sprayed seal surfacing.
- GA portion of the apron and portion of Taxiway C rehabilitated in 2015. No work required at this time, although a reseal would be provided to re-new the surface.

The above determinations required Council to accept two issues, as detailed in the concept options development report. Those issues were:

- Acceptance that this project is a maintenance exercise, rather than a pavement upgrade, and that practical and affordable betterment will take precedence over full and strict regulatory compliance, as a step towards a compliant airport pavement system in the future.
- No strengthening for future B737 aircraft will be provided.
- In theory, the existing pavement is under strength, even for the existing aircraft, and should have failed structurally many years ago, but has not, so it is clearly significantly stronger than theory suggests.

The first two issues are relatively straight forward, as discussed above. The last issue is more complex and relies on engineering judgement and is discussed further below.

Airfield planning review

As part of the tender design development, a review of the airfield planning elements was undertaken. Based on discussions with Council staff and consultation with the Councillors, it was determined that the project would include:

- Formalised reduction of the Runway 06/24 width to 18 m.
- Reduction of the Runway 06/24 length to approximately 1,000 m, by relocating the 24 threshold to the western side of the Runway 12/30 strip, effectively deconflicting the two runways.
- Relocation of RPT parking Bay 3 to the northern side of the apron (as detailed in the master plan).
- Widening of the portion of Taxiway C that was not rehabilitated in 2015, between the hold point and the Runway 06/24 edge.

A revised layout and line marking plan is include in Appendix 4 and reflects these changes. All other existing filets and line marking were also reviewed and made compliant with current regulations for the critical aircraft using the various pavement areas.

Ancillary scope

In addition to the pavement works, the project also provides for the following ancillary works:

- Drainage improvements. Focused on surface drainage outside of the runway strip and the runway strip/flank grades. This is being designed and managed by Council staff.

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- Airfield lighting. A new field lighting system is proposed to replace the non-compliant and old existing system. Because the new lights must be installed in the resurfaced pavements, this will is best delivered as part of the pavement works. The lighting works are generally limited to the RPT pavements and the scope generally includes:
  - Pit and duct system.
  - Primary and secondary cable.
  - LED runway and taxiway edge lights.
  - Conversion of one IWDI to a non-lit windsock.
  - Electrical supply to existing PAPIs.
  - Airfield lighting control system.
- Augmented RPT apron high mast lighting.

The details of these scope items are detailed elsewhere and are not included in this report.

Tender design details

As stated above, the decision not the actively strengthen the existing pavements was based on the prevailing good performance of the existing pavements, under the historical aircraft traffic loadings, implying that the existing pavements are structurally better than theoretical analysis suggests. To demonstrate that theoretical capacity, the representative existing pavement structures were modelled in the APSDS, the airport specific version of CIRCLY. APSDS was used because FAARFIELD does not allow flexible pavements without thick asphalt surfaces to be analysed.

The following modelling inputs were adopted for all analyses:

- 20 years of annual aircraft traffic loadings, without annualised growth, following FAA (USA) design principles. This is conservative.
- All aircraft modelled at their nominated maximum weight, following FAA design principles. This is conservative.
- Only departures included in the design traffic, following FAA design principles. This is reasonable.
- Taxiway wander (773 mm) adopted for all pavements, following FAA design principles. This is conservative.

The APSDS output files for each of the analyses detailed in the following sections are included in Appendix 5. In all cases, the outcome of the pavement analysis was expressed as the CDF value. The CDF is the cumulative damage factor, which is equal to the portion of the theoretical pavement structural life consumed by the aircraft loadings. In practice, a CDF just under 1.0 is desired, indicating an adequate pavement that has some reserve capacity. For CDF values exceeding 1.0, the pavement is theoretically insufficient for the projected aircraft traffic, while CDF values significantly below 1.0 indicate the pavement is overly conservative, with greater strength than required. When considering CDF values, it is important to understand that pavement life is highly sensitive to pavement thickness and to subgrade CBR. Therefore, even small changes in pavement thickness and subgrade CBR can change the CDF by orders of magnitude.

RPT and FIFO Pavements

When the representative existing pavement structure was modelled under the current aircraft loadings the pavement ranged from grossly understrength (CBR 3 to CBR 8) to significantly overstrength (CBR 15 and CBR 20). The calculated CDF values and associated theoretical pavement lives are summarised in the following table, for the different subgrade CBR values.

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Subgrade bearing capacity (CBR %)	CDF	Effective life (years)
3	>1,000	<1
5	>1,000	<1
8	427	<1
10	41.4	0.48
12	6.2	3.2
15	0.32	62
20	<0.01	>2,000

This analysis implies that under the prevailing Q400, F100 and E190 aircraft traffic loadings, the pavement is performing significantly stronger than it theoretically should. If the modelling was representative of the existing pavement performance, then the pavement would have failed under almost any trafficking by these aircraft, particularly the F100, which was the critical aircraft for pavement strength. However, these aircraft have been operating at Cloncurry airport for some years (with moderate F100 use reported as far back as 2012) and the pavements have not in fact failed. Rather, they are considered to be structurally sound, although the surfaces are old and in poor condition. However, that is the result of the age of the surface and the lack of routine maintenance, but is not a structural strength deficiency.

In theory, the better than modelled pavement performance can be taken into account by adopting an improved subgrade strength. Based on interpolation of the results in the table above, the pavement is performing as though the subgrade CBR is 13% or higher. That is much higher than the soaked laboratory values of CBR 2-4%. It also exceeds the CBR 6-8% that was inferred from the DCP testing, but is comparable to the CBR 10% adopted by Queensland Main Roads for previous analysis of the Cloncurry Airport pavements in 1997, and explained as being reasonable based on the width of the runway, compared to width of the regularly trafficked central portion of the runway, keeping the trafficked portion dry, noting that the nature of the clay subgrade is to be very stiff when dry, but to weaken considerably when wet. It is also consistent with the historical pavement strength rating in the ERSA, which nominates a subgrade category A, which is only assigned to CBR 13% and higher subgrades. Based on the analysis above, CBR 11% was considered to be reasonable for existing pavement upgrade calculations. That results in a minimum asphalt overlay of 55 mm thickness in the wheel paths, after 5 mm of the existing surface is removed by cold planer.

GA Pavements

For the GA pavement, the existing pavement is adequate when the subgrade is CBR 5% or higher, as detailed in the following table.

Subgrade bearing capacity (CBR %)	CDF	Effective life (years)
3	318	0.06
5	0.29	69
8	<0.01	>2,000

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Based on that, combined with the good structural performance of the GA pavement to date, despite the poor surface condition, and for all the same reasons discussion above for the RPT pavements, CBR 6% was adopted as the effective subgrade bearing capacity, either under the existing pavements or following lime stabilisation of the subgrade in areas of new pavement. For the existing pavements, foamed bitumen stabilisation and a sprayed seal surface would provide a pavement that is consistent with Australian practice for GA pavements at regional airports. That would be provided by:

- 150 mm deep stabilisation of the existing pavement surface and base with nominally 3.5% foamed bitumen and 1% slag-lime blend.
- 14/10 airport quality sprayed seal with a lockdown treatment.
- Retention of the residual existing pavement.

The above structure is actually more than is theoretically required. However, the minimal practical stabilisation depth is 150 mm, so that has been adopted.

Basis of pavement works

Based on the above theoretical analysis, experience at other regional airports in Queensland, and the good performance of the existing pavements at Cloncurry Airport under the prevailing and historical aircraft traffic loadings, the following basis of the pavement works was determined:

- RPT Pavements:
  - No targeted strengthening be provided, based on adequate existing pavement performance.
  - The existing pavement be resurfaced with a 50-80 mm asphalt overlay, allowing for some shape correction and natural minor strengthening of the pavement.
  - Any B737 or similar upgrade requirements be reconsidered during the subsequent resurfacing, in nominally10-12 years time, or by a Pavement Concession on a case-by-case basis.
- GA Pavements:
  - No targeted strengthening be provided, based on adequate existing pavement performance.
  - The existing pavement be partially reconstructed by insitu foamed bitumen stabilisation, providing an improved and moisture resistant base course to the pavement.
  - A two coat (14/10) sprayed seal surface be provided, followed by an emulsion sand, sand filled, lockdown treatment.
  - Taxiway C and the GA apron area to be provided with a two-coat (14/10) reseal only.

The scope of pavement work is reflected in the pavement type plans in Appendix 6. All the above pavement structures and works were determined based on pavement strength alone. However, whenever pavement resurfacing, upgrade or reconstruction is proposed, surface shape correction should also be allowed for, to provide a pavement that is compliant with the shape requirements of the airport regulations, as detailed in MOS 139.

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Geometric design

Based on the engineering survey, the existing runway surface shape is characterised as:

- Runway 12/30
  - Undulating long section.
  - Centre crown with typical 1.0-1.2% symmetrical cross fall, except at intersections with Runway 06/24, old (disused) runways and the RPT apron taxiways, where one or both sides of the runway approach near-horizontal, which is not conducive to surface drainage.
  - Transition to one-way cross fall for the northern most 300 m of runway.
  - Low deviation in cross falls, with no significant changes in crossfall across the width of the runway, no reverse grades, and no measurable excessive short-wavelength unevenness.
- Runway 06/24
  - Undulating long section.
  - Centre crown with typical 0.9-1.1% symmetrical cross fall, except at intersections with Runway 12/30, old (disused) runways and Taxiway C, where one or both sides of the runway approach near-horizontal.
  - Low deviation in cross falls, with no significant changes in crossfall across the width of the runway, no reverse grades, and no measurable excessive short wavelength unevenness.

The lack of grade deviations and short wavelength unevenness suggests the pavements were constructed on a solid foundation, which is positive. However, when coupled with a sprayed seal surface that is best not disturbed, and a desire not to remove existing pavement thickness and strength, well-shaped runways require significant volumes of asphalt to correct the longer wavelength undulations and to restore compliant cross falls at intersections with disused pavements, and to generally provide a minimum 0.5% crossfall, for positive surface drainage through intersections with other pavements.

The geometric design of the stabilised Runway 06/24 pavement and the asphalt overlay of the Runway 12/30 pavement were developed to address these issues. The design contours for the various pavement areas are shown in Appendix 7. Iso-plans showing the lift from the existing surface level to the design surface level are in Appendix 8.

Runway 12/30

The geometric design for Runway 12/30 was developed to smooth the centreline slopes and vertical curves and to reduce the extent of areas of very low (less than 0.5%) existing transverse gradient, in balance with providing an economical resurfacing. The shoulder cross fall was generally increased to 2.5% to match back to the existing levels as efficiently as possible, and to minimise the quantity of flank regrading required.

Tabulations of the Runway 12/30 lifts (existing to design), thicknesses (after milling), existing crossfalls and design crossfalls are in Appendix 9. These show that the asphalt lift ranges from -7 mm to 134 mm within the central 30 m of the designated runway length. The average lift is 54 mm and the majority of lifts are between 46 mm and 68 mm.

The improvement in the centreline smoothness is clearly shown in the figure below, and the subsequent table summarises the cross fall improvement. The design does not mitigate all the existing non-compliant crossfalls, but it would be unreasonably expensive to do so. Consequently, the geometric deign represents a significant betterment, towards incremental improvement and staged compliance.

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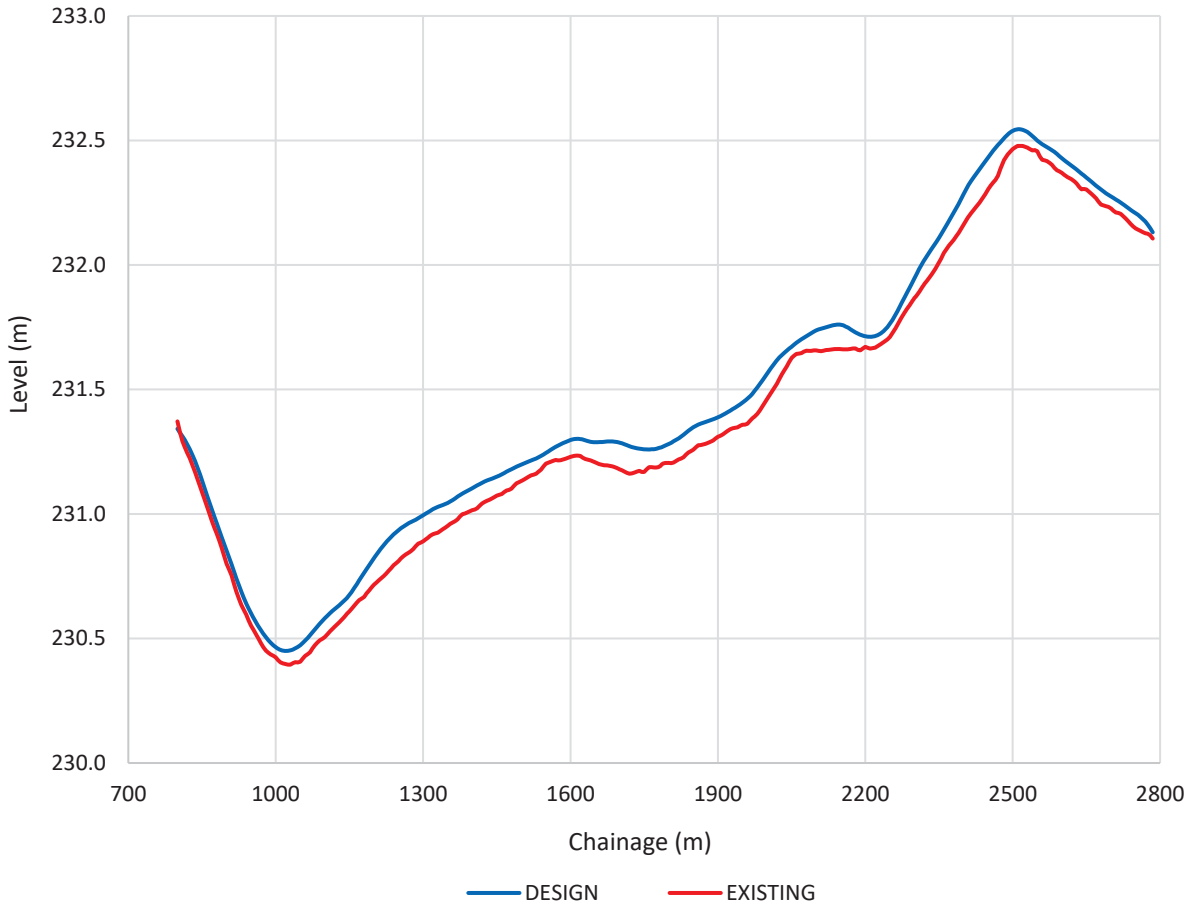

Portion of cross falls	Existing surface	Design surface
Above 2.0%	0.1%	0.0%
Below 0.5%	5.7%	1.3%
Below 1.0%	34.4%	16.1%

Runway 06/24

The geometric design for Runway 06/24 was developed based on generally matching the existing centreline crown level, and approximately matching into the existing levels at the 11.25 m offsets. The existing very low cross falls generally required portions of the central width of the runway to be lifted. This resulted in a lift from the existing to the design level ranging from -39 mm to 106 mm, with most lifts being between -8 mm and 9 mm, and an average lift of -1 mm. The extensive very flat (less than 0.5%) cross falls were increased as summarised in the following table. Tabulations of the Runway 06/24 lifts, existing cross falls and design cross falls are in Appendix 10. Although almost 50% of the runway remains flatter than the MOS 139 required 1.0%, the percentage of very low cross falls, lower than 0.5%, has been reduced significant, which represents a major improvement. The smoother centreline crown levels and the need to lift the centreline level over isolated lengths of the runway can be seen in the subsequent figure. These areas will require some imported or recovered top-up material prior to stabilisation.

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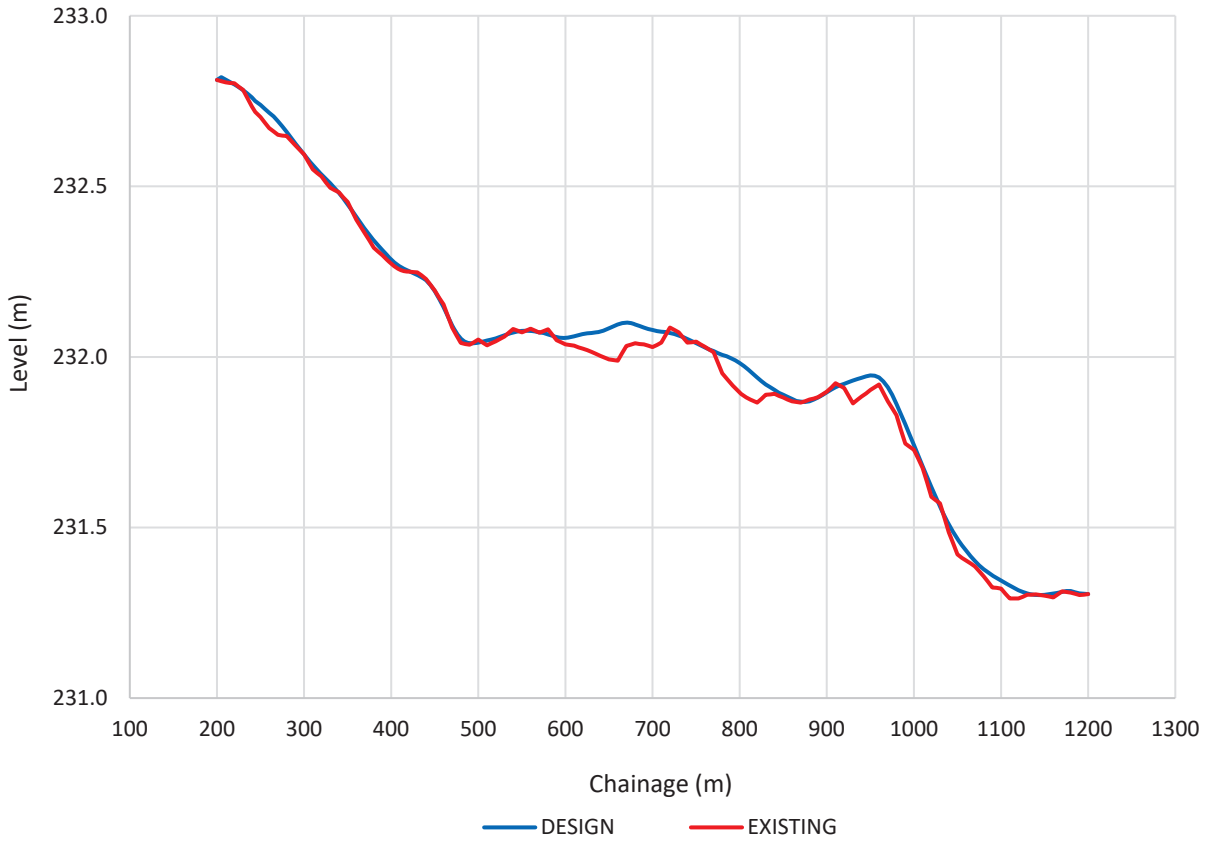
Portion of cross falls	Existing surface	Design surface
Above 2.0%	0.0%	0.0%
Below 0.5%	1.8%	23.1%
Below 1.0%	48.5%	60.0%



RPT Apron and Taxiways

The Runway 12/30 asphalt overlay continues over Taxiway A, Taxiway B and the RPT portion of the apron. The new surface shape is generally 50-70 mm above the existing and smooths out a significant amount of the existing unevenness. The surface matches into the existing pavement levels near the drain that runs along the front of the terminal and hangars, as well as at the extent of the high strength pavement, as it transitions to the GA portion of the apron.

GA Apron and Taxiway

The rehabilitation of Runway 06/24 matches into the existing pavement levels at the Runway 06/24 hold point on Taxiway C. The RPT apron asphalt overlay matches into the existing pavement levels at the high strength pavement line. The GA apron is being spray sealed only, so no geometric design has been completed.

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Issues for resolution

Residual issue for resolution during the final design of the pavement works at Cloncurry airport include:

- Match-in details from the overlayed and stabilised pavements to be surrounding infrastructure.
- Options for re-use of the existing pavement materials to be returned to unsealed flanks.
- Asphalt, foamed bitumen base and flank filling material design or selection.
- Ancillary works design, primarily the airfield lighting and high mast lighting.

This design report was prepared by:

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16 November 2024

Appendices:
1. Summary of geotechnical investigation results.
2. Existing engineering survey.
3. Demonstrative photographs from pavement inspection.
4. Proposed airfield layout and line marking.
5. APSDS pavement analysis output files.
6. Pavement type plans.
7. Design surface contours.
8. Existing to design lift plans.
9. Runway 12/30 lifts, thicknesses and crossfalls.
10. Runway 06/24 lifts and crossfalls.

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Appendix 1
Summary of Geotechnical Investigation Results

	Test hole	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	H1	H2	H3	H4	H5	H6	H7	H8	H9
	Area	GA Apron	GA Apron	RPT Apron	RPT Apron	RPT Apron	RPT Apron	RPT Apron	RPT Apron	RPT Apron	RPT Apron	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30
Surface	(mm)	25	30	30	20	30	30	30	25	20	25	40	45	45	50	40	50	40	50	50
Base	(mm)	225	170	620	530	470	370	570	575	780	275	310	400	300	300	400	300	410	300	400
Sub-base	(mm)						600		600		300									
Base PI	%	12			28	5	20				6	NP			3	NP	4		24	
Base LS	%	8			16		12					NP			3	NP			3	
Soaked CBR	%	3	2.5	2.5	2.5	4.5		2		2	3	7	11	1.5		7			2.5	
DCP CBR	%	8	10	12	51	12	8	6	6	8	6	12	4	8	8	8	4	6	6	8
Base coure grading (percentage pasing)																				
26.5	%	100			99	98	97		99		99	99			96	98	88		92	
19	%	92			87	91	85		88		91	94			90	97	84		84	
13.2	%	76			75	82	72		78		80	89			85	93	76		77	
9.6	%	66			65	74	63		70		72	82			80	87	70		72	
6.7	%	58			57	66	56		62		64	76			74	82	64		67	
4.75	%	53			51	60	49		55		57	70			67	75	58		61	
2.36	%	46			41	49	41		45		45	60			54	63	46		49	
1.18	%	40			32	38	32		34		32	45			41	50	34		37	
0.6	%	36			23	28	25		24		22	30			31	39	24		27	
0.425	%	33			20	24	21		20		18	24			27	35	20		24	
0.3	%	31			18	19	18		15		14	19			23	31	17		21	
0.15	%	25			10	11	13		8		8	10			18	22	13		16	
0.075	%	18			5	4	9		3		3	2			12	11	9		11	

	Test hole	H10	H11	H12	H13	H14	L2	L3	L4	L5	L6	L7	L8	L9	L10	T1	T2	T3	T4
	Area	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 12/30	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	RWY 06/24	TWY A	TWY A	TWY B	TWY B
Bituminous		70	60	95	90	70	40	40	40	40	30	45	40	25	10	25	30	50	50
Surface	(mm)	70	60	90	90	70	40	40	40	40	30	45	40	25	10	25	30	50	50
Base	(mm)	330	290	355	210	280	210	260	210	260	370	300	300	275	240	625	470	450	400
Sub-base	(mm)		300															150	
Base PI	%	7			NP	5	9	6	3	15	11	11			7	15		5	3
Base LS	%	3			NP	3		4	3	3	6				4	6			
Soaked CBR	%		3.5	3.5	2.5		2	2		60		18	3	2	4.5	2.5	8	3.5	2
DCP CBR	%	4	12	6	6	6	4	2	2	6	8	12	8	8	6	10	6	6	6
Base coure grading (percentage pasing)																			
26.5	%	95			96	98	97	96	96	83	87	75			100	100		93	88
19	%	89			86	92	94	94	92	82	79	68			94	88		82	70
13.2	%	84			77	86	92	91	89	81	75	65			78	78		73	61
9.6	%	78			68	79	89	88	85	78	69	63			67	70		63	52
6.7	%	71			59	71	85	85	81	76	63	61			58	61		54	44
4.75	%	64			52	63	81	81	78	74	57	59			52	54		47	37
2.36	%	53			42	52	72	72	73	71	47	54			43	44		38	30
1.18	%	41			32	38	60	62	68	66	38	50			36	35		34	277
0.6	%	35			25	26	47	50	62	54	32	47			30	28		30	25
0.425	%	20			23	21	40	43	59	43	29	45			28	24		29	24
0.3	%	25			20	17	32	36	55	32	27	44			26	21		27	22
0.15	%	12			14	10	18	24	42	20	22	41			21	15		21	18
0.075	%	3			7	4	6	14	30	10	16	38			16	10		13	16

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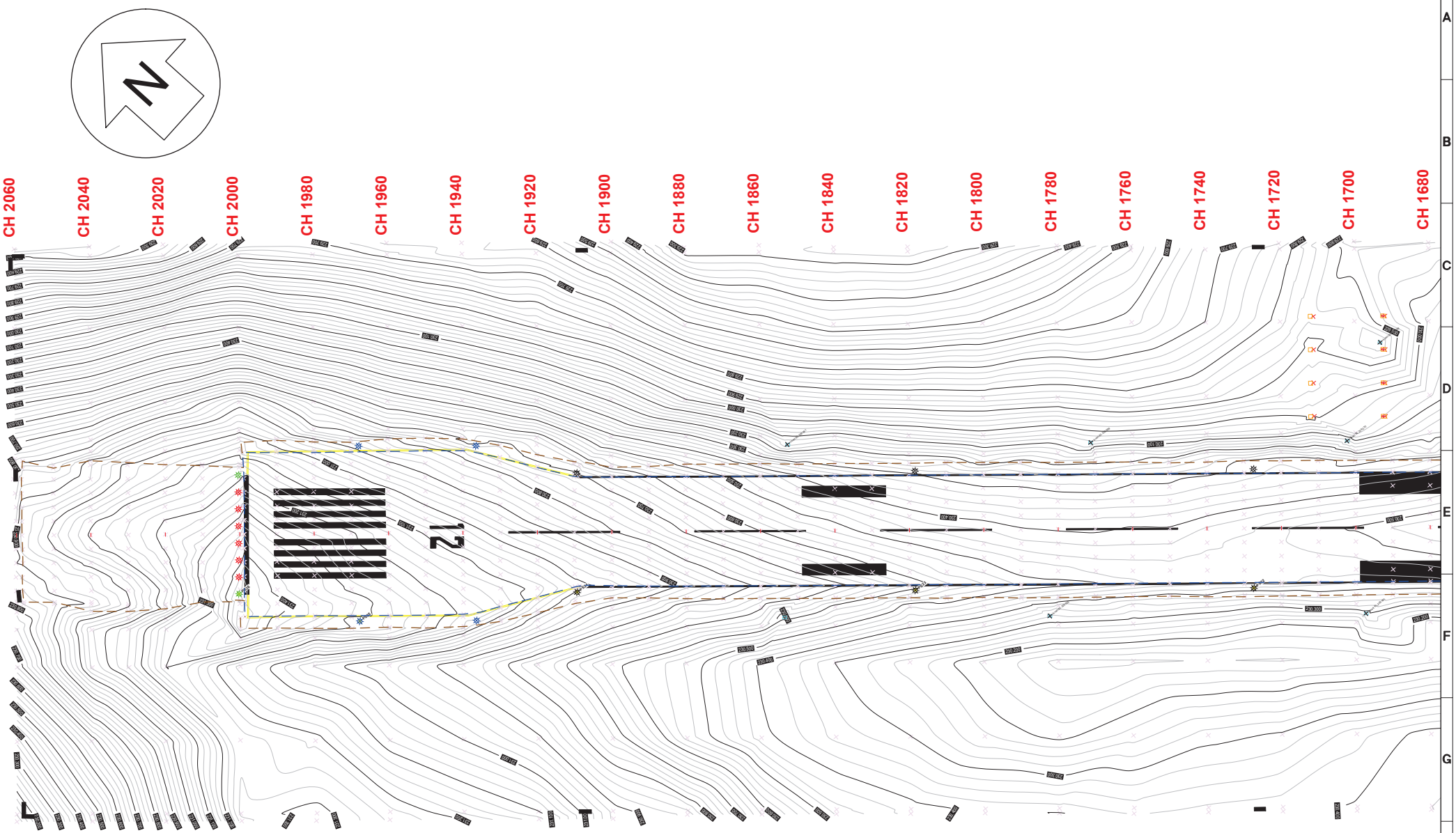
Appendix 2
Existing Engineering Survey



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121 RICKERTT RD RANSOME QLD 4154
PH: +617 3390 1887
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WEB: www.paveset.com.au

CLIENT: APES

SURVEYED: BM DF | FIELD BOOK: | DATE:

DRAWN: MF | CHECKED:

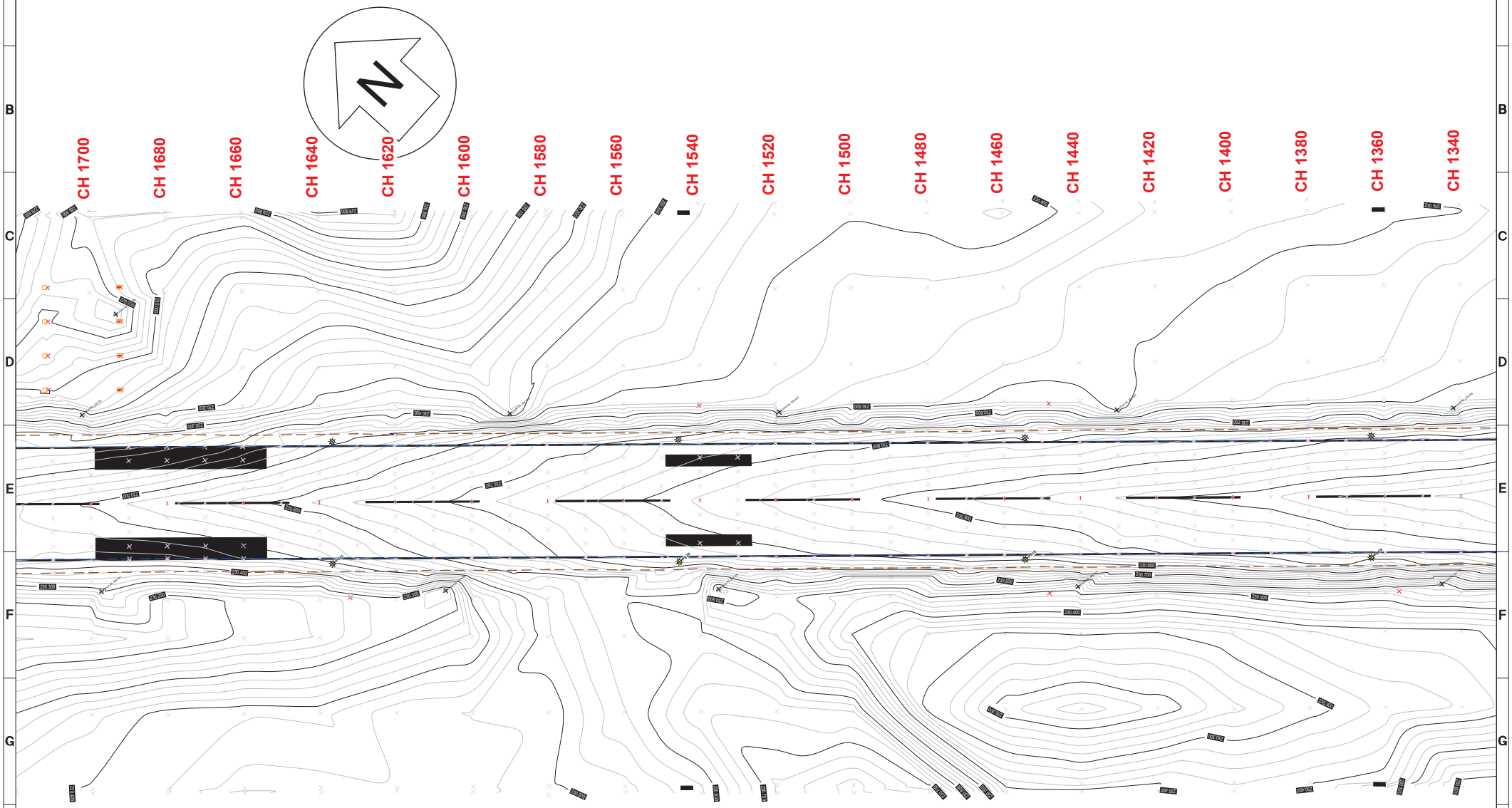
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS

SCALE: 1: 500

DRAWING NAME. PS-1230-EX-01

Plot Mon Sep 9 09:53:41 2024



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PH: +617 3390 1887
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-1230-EX-02

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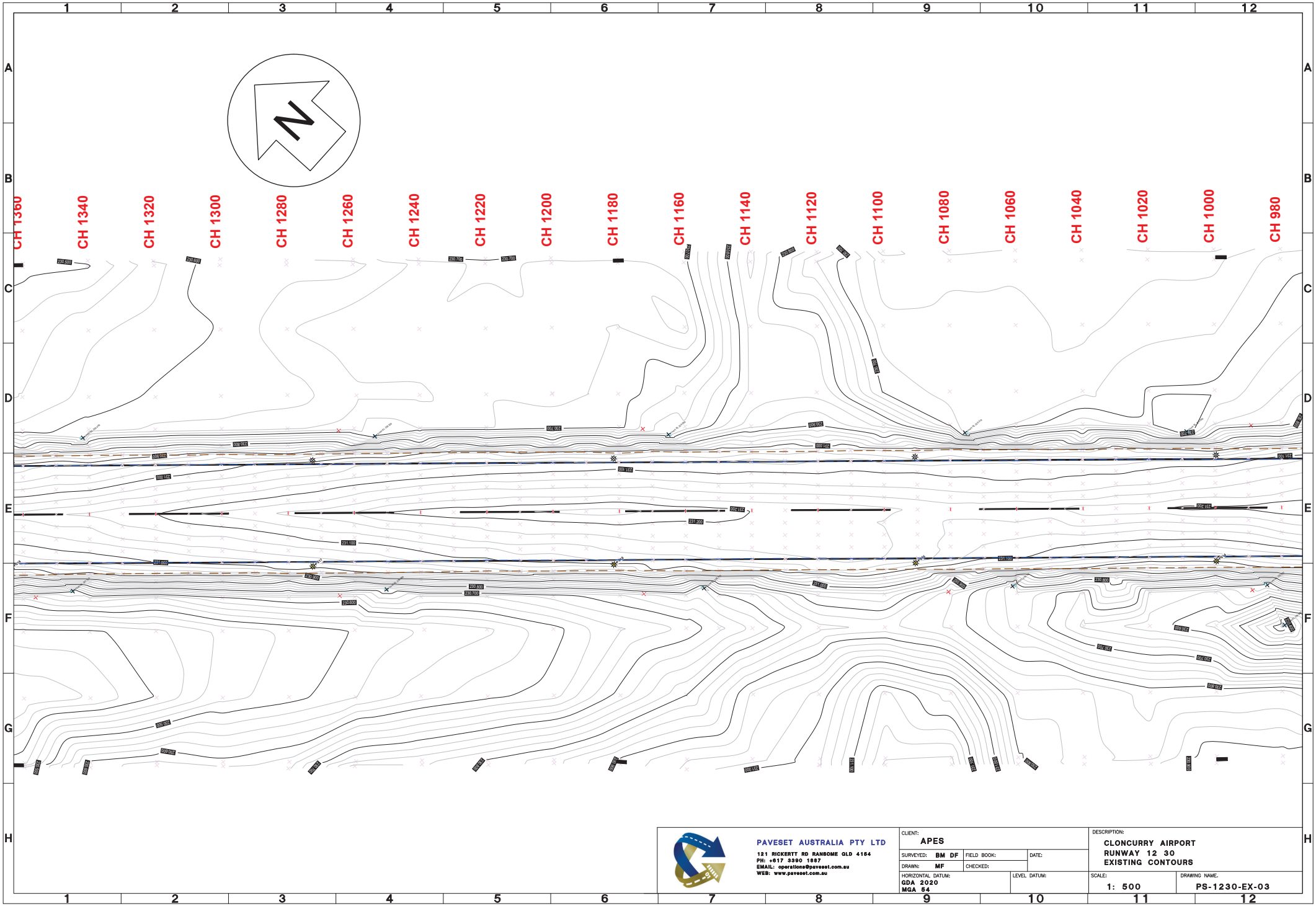

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PH: +617 3390 1887
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
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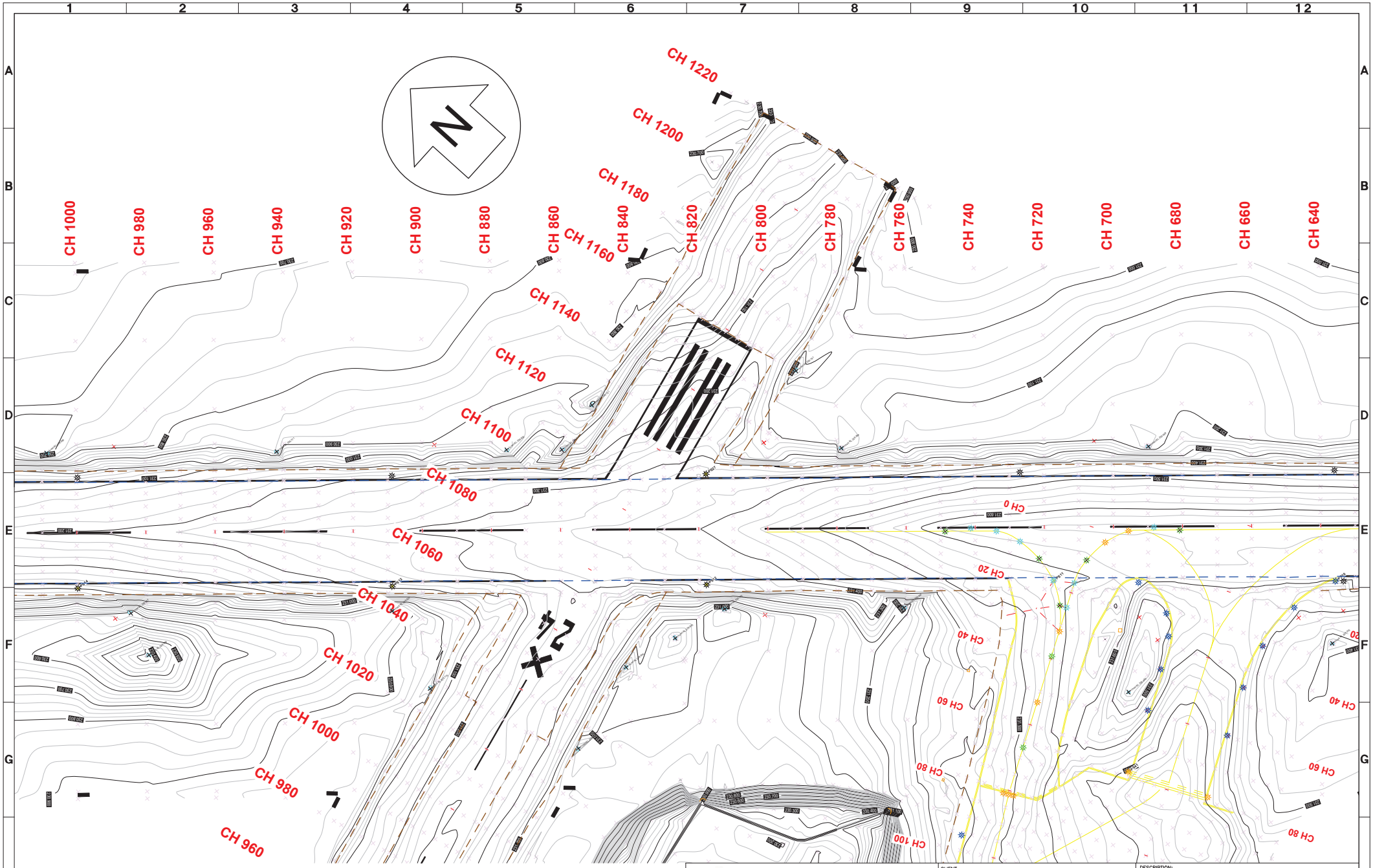
Plot Mon Sep 9 09:54:25 2024



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WEB: www.paveset.com.au

CLIENT: APES

SURVEYED: BM DF | FIELD BOOK: | DATE:

DRAWN: MF | CHECKED:

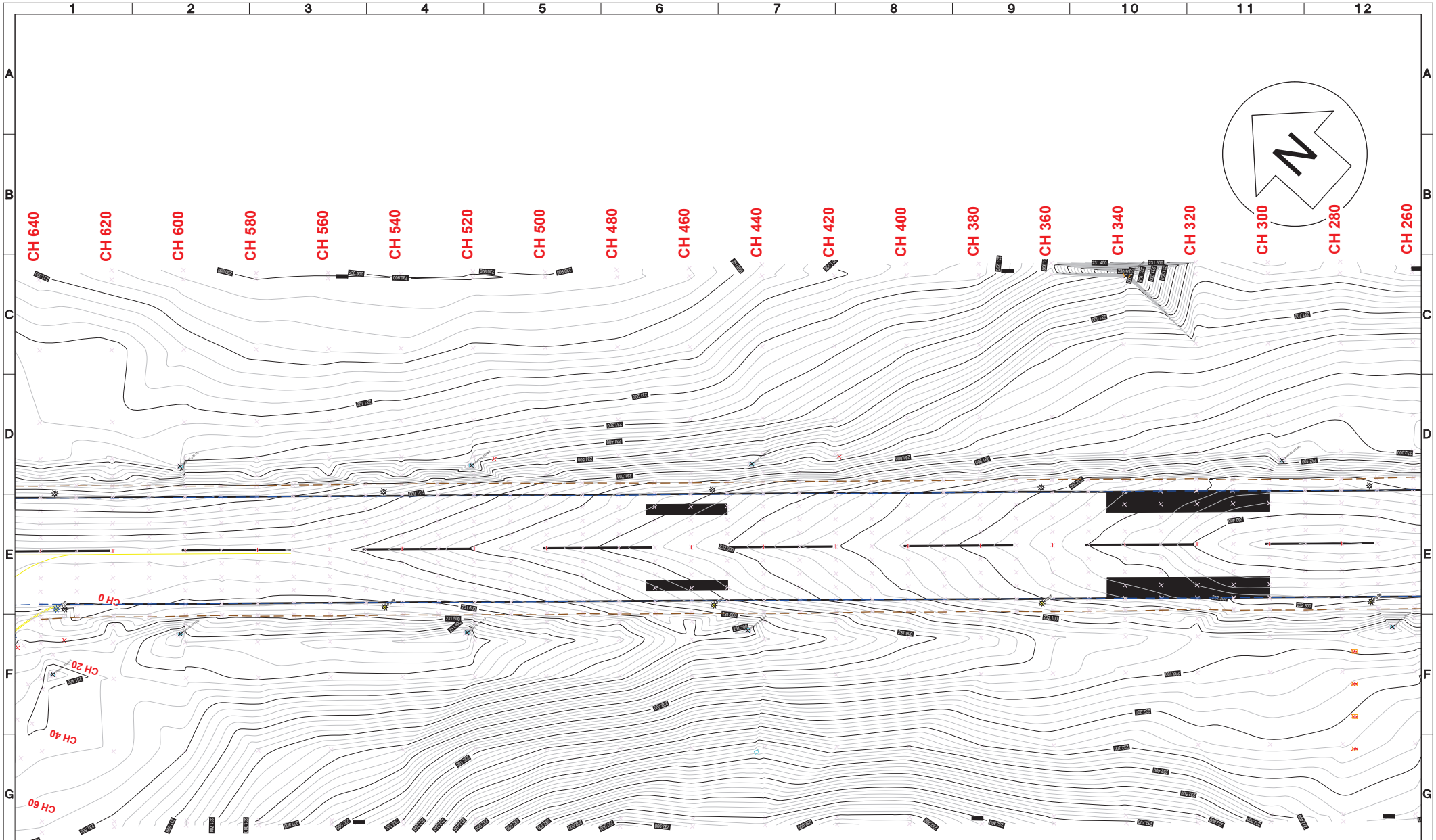
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS

SCALE: 1: 500

DRAWING NAME. PS-1230-EX-04

Plot Mon Sep 9 09:54:54 2024



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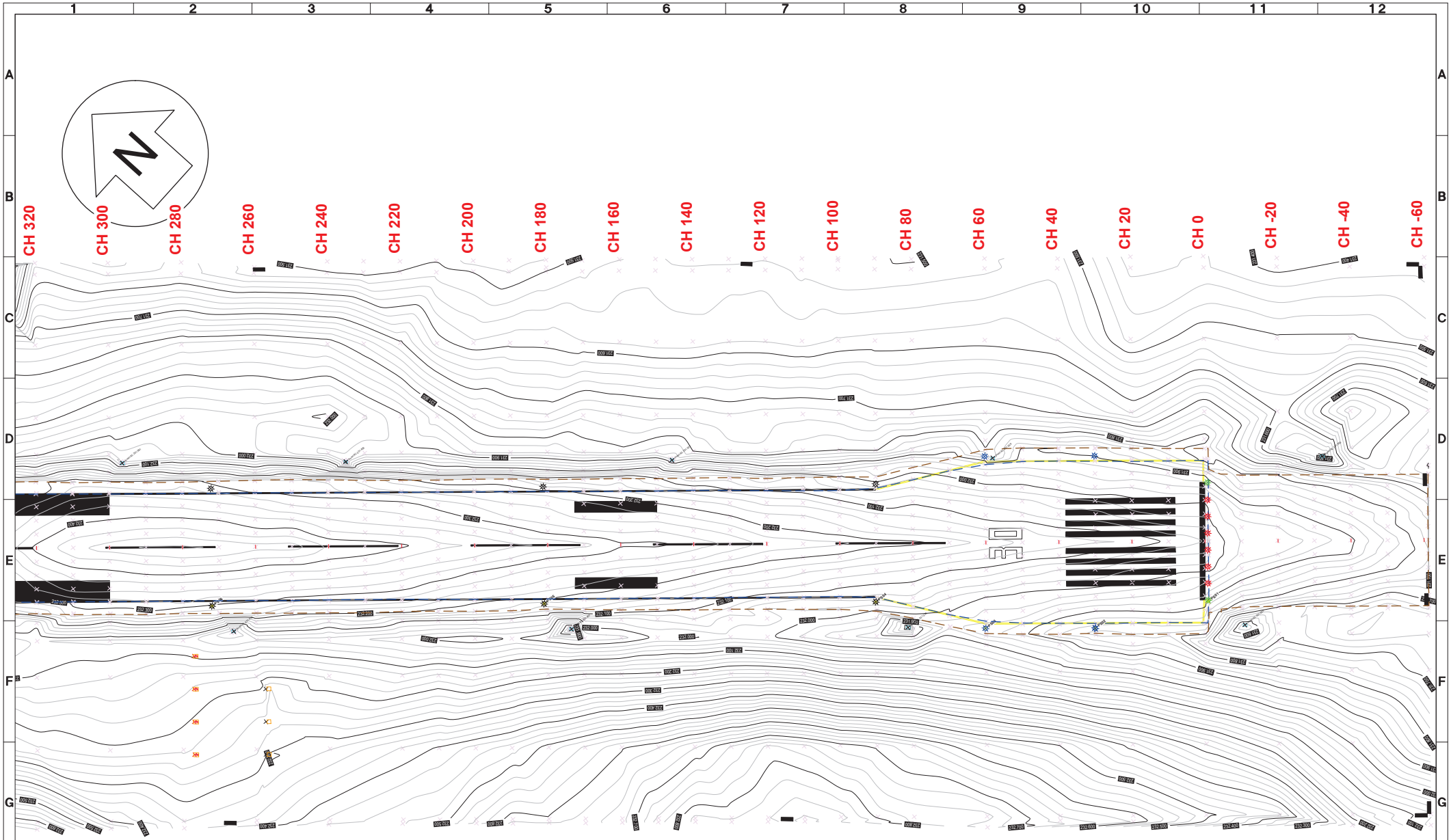
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-1230-EX-05

Plot Mon Sep 9 09:55:18 2024



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PH: +617 3390 1887
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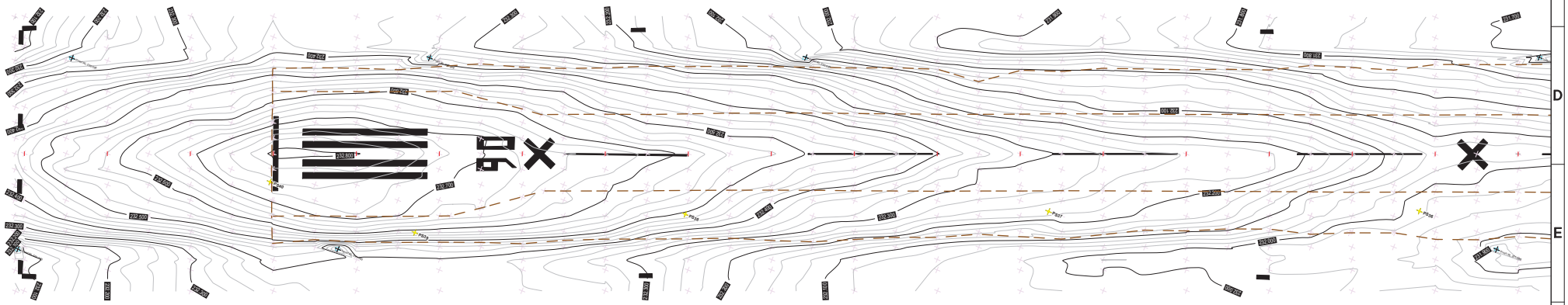
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 12 30 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-1230-EX-06

Plot Mon Sep 9 09:56:07 2024



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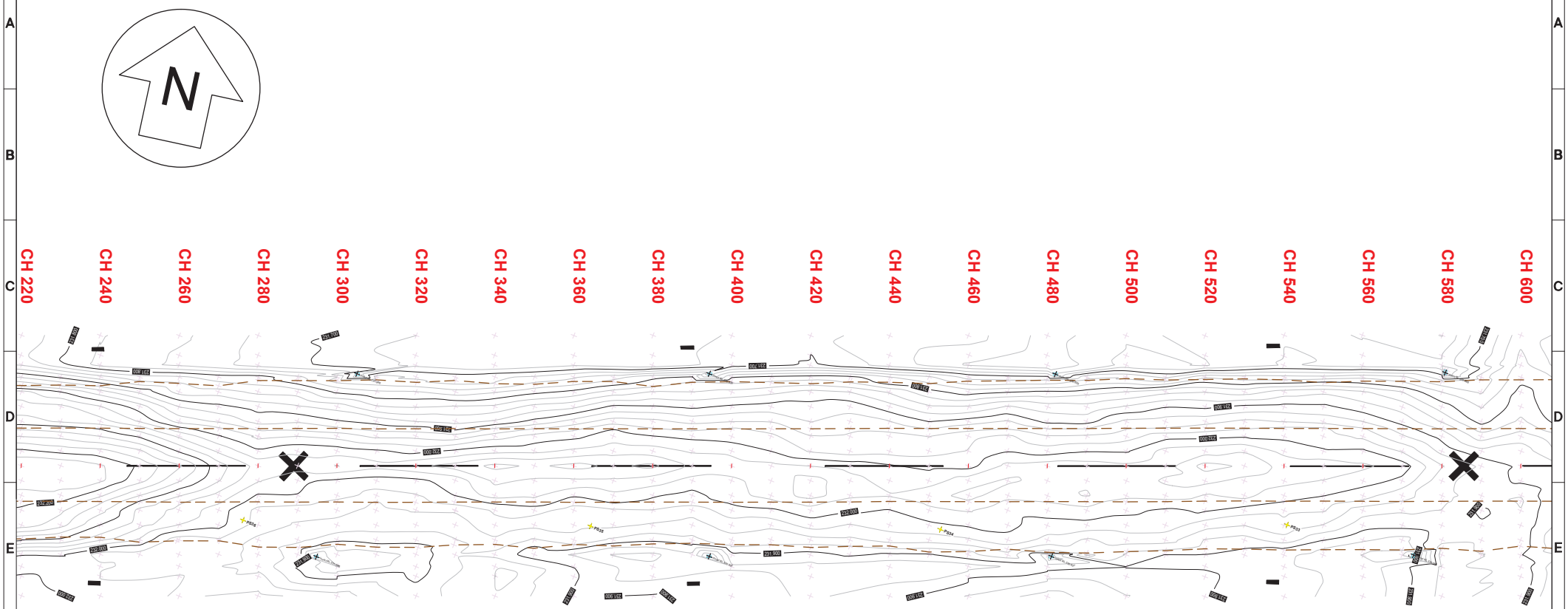
PH: +617 3390 1687
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 06 24 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-0624-EX-01

Plot Mon Sep 9 10:01:19 2024



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PH: +617 3390 1687
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 06 24 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
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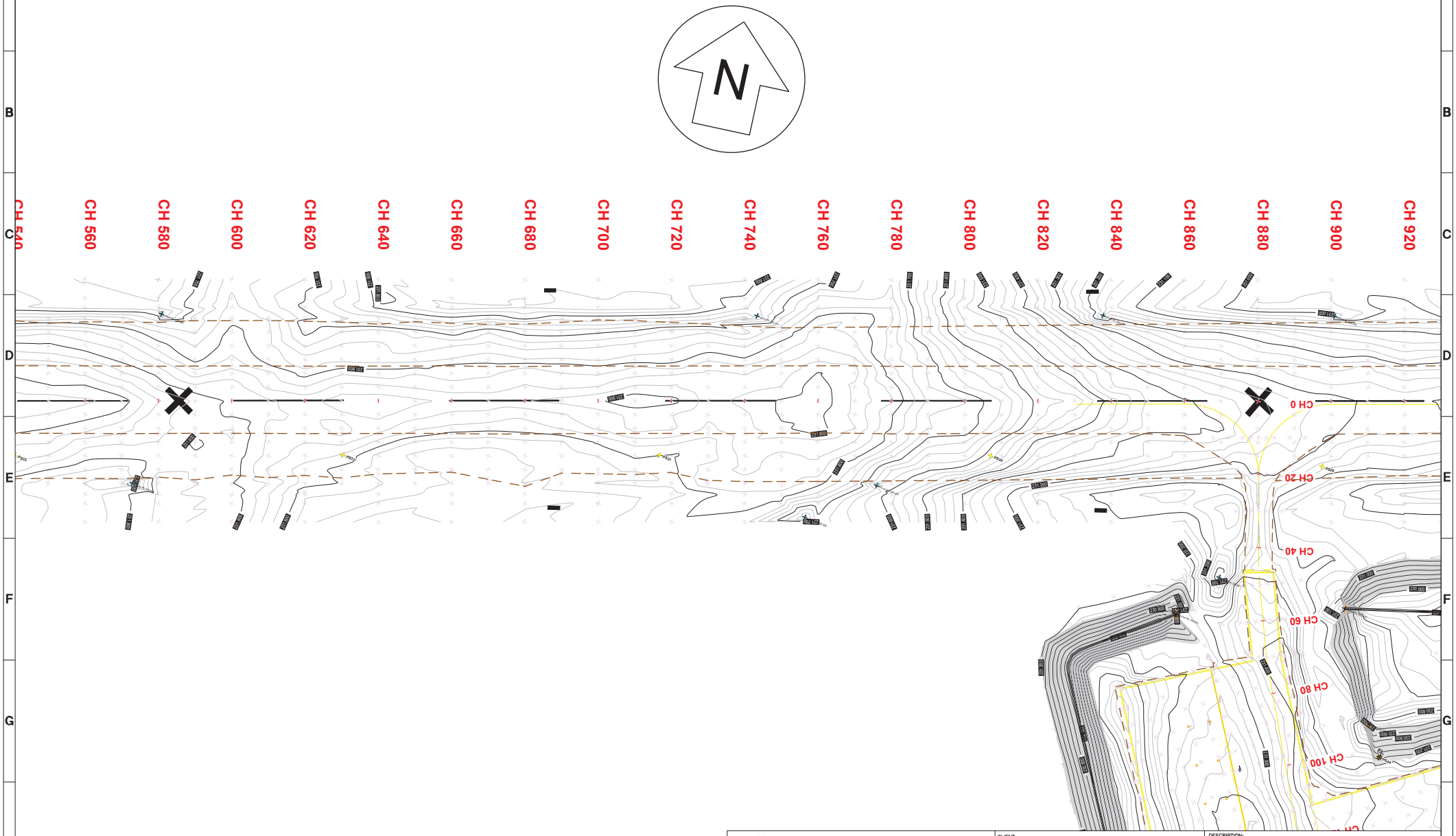
Plot Mon Sep 9 10:01:45 2024



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PH: +617 3390 1687
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES

SURVEYED: BM DF | FIELD BOOK: | DATE:

DRAWN: MF | CHECKED:

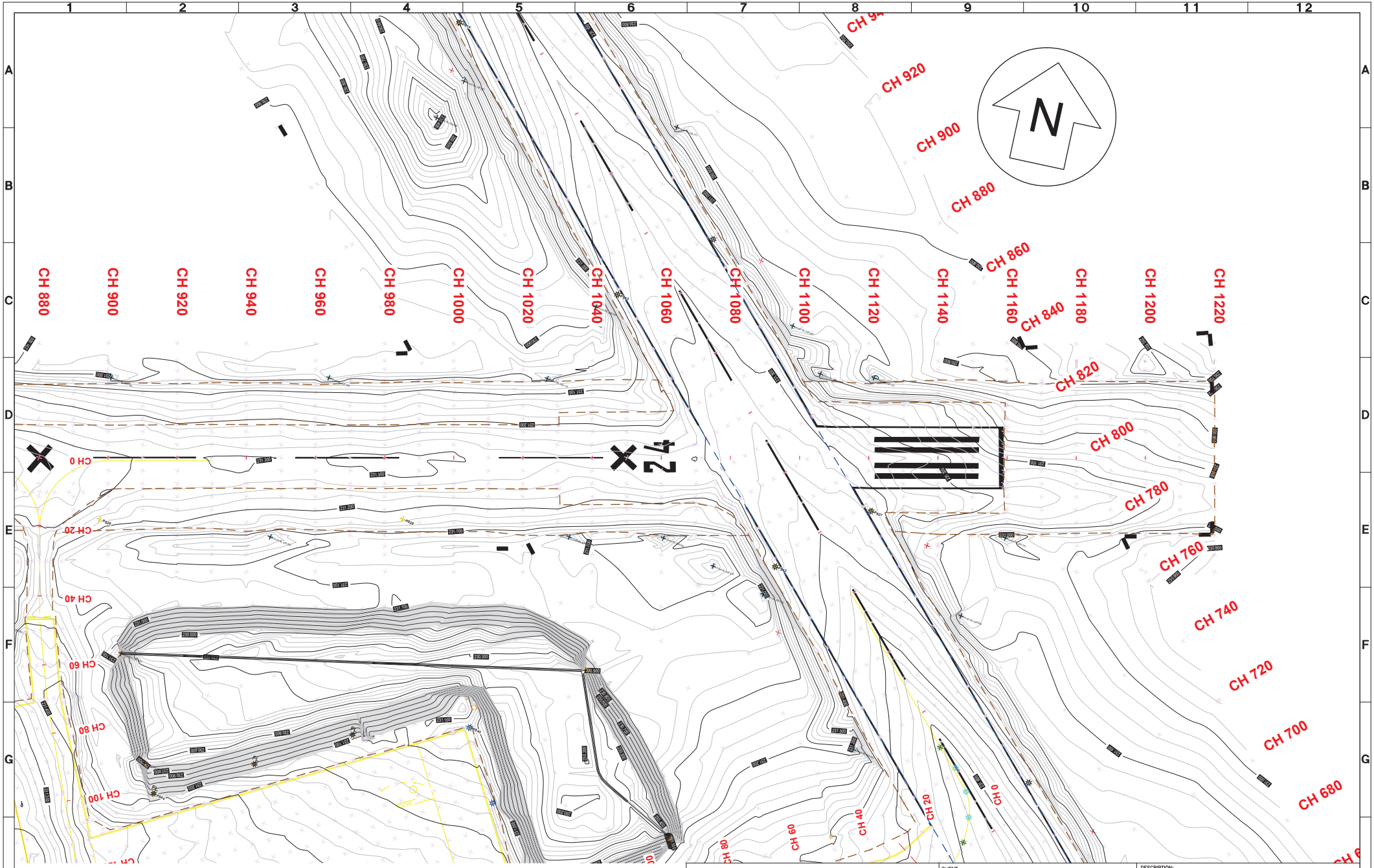
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT
RUNWAY 06 24
EXISTING CONTOURS

SCALE: 1: 500

DRAWING NAME. PS-0624-EX-03

Plot Mon Sep 9 10:02:50 2024



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PH: +617 3390 1887
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 06 24 EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-0624-EX-04

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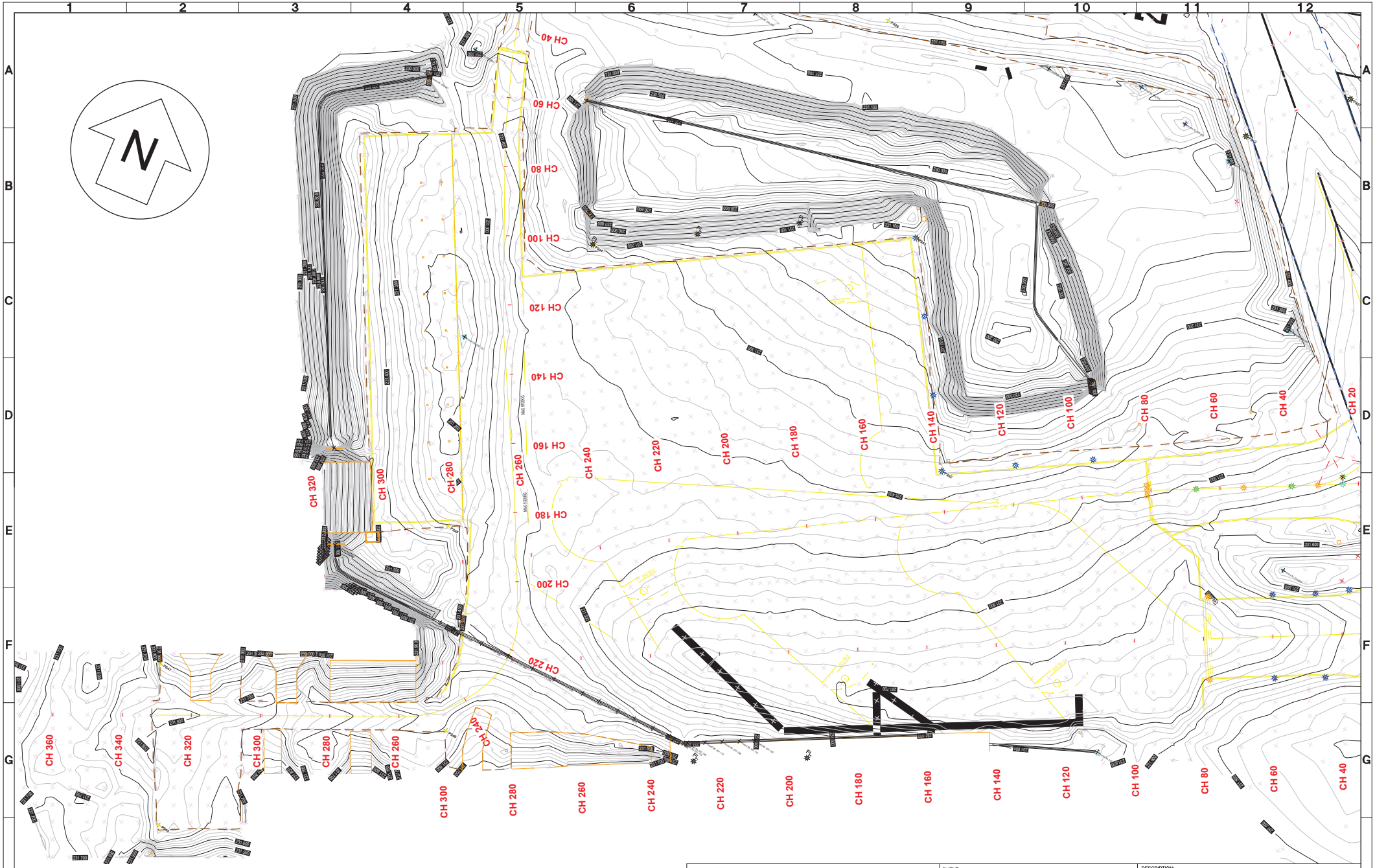

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121 RICKERTT RD RANSOME QLD 4154
PH: +617 3390 1887
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT APRON AND TAXIWAYS EXISTING CONTOURS
SURVEYED: BM DF	FIELD BOOK:	DATE:	
DRAWN: MF	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-APRN-EX-01

Plot Mon Sep 9 10:05:59 2024

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Appendix 3
Demonstrative Photographs from Pavement Inspection

Photograph 1. General view of Runway 12/30.

Photograph 2. Typical Runway 12/30 surface.

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Photograph 3. Example of missing micro-surfacing from Runway 12/30 surface.

Photograph 4. Example of Runway 12/30 surface age cracking.

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Photograph 5. Example of Runway 12/30 surface bleeding.

Photograph 6. Example of Runway 12/30 surface roller cracking.

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Photograph 7. Example of Runway 12/30 surface edge cracking.

Photograph 8. Moderate rubber contamination in the Runway 12/30 touch down zone.

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Photograph 9. Typical Runway 12/30 shoulder pavement.

Photograph 10. Typical Runway 12/30 shoulder surface.

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Photograph 11. General view of the RPT Apron.


Photograph 12. Typical RPT apron surface.

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Photograph 13. General view of Runway 06/24.

Photograph 14. Typical Runway 06/24 surface.

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Photograph 15. Example of Runway 06/24 surface cracking.

Photograph 16. Example of Runway 06/24 vegetation growth.

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Photograph 17. General view of Taxiway C.

Photograph 18. Typical Taxiway C surface.

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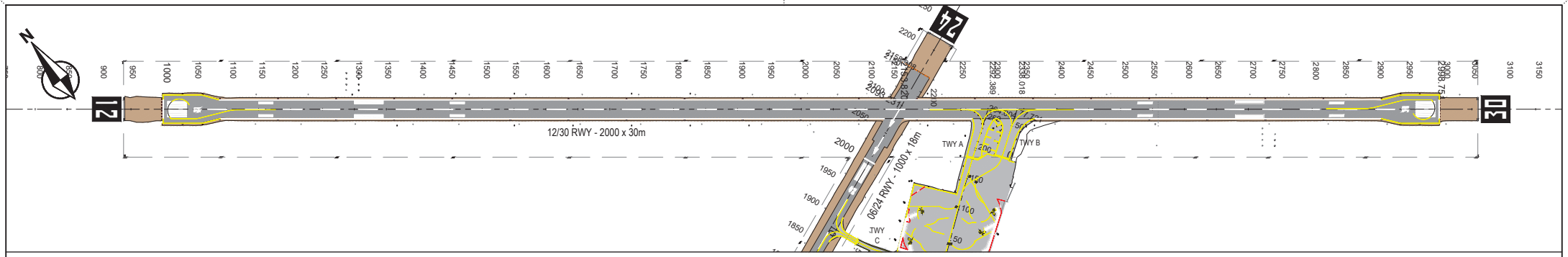
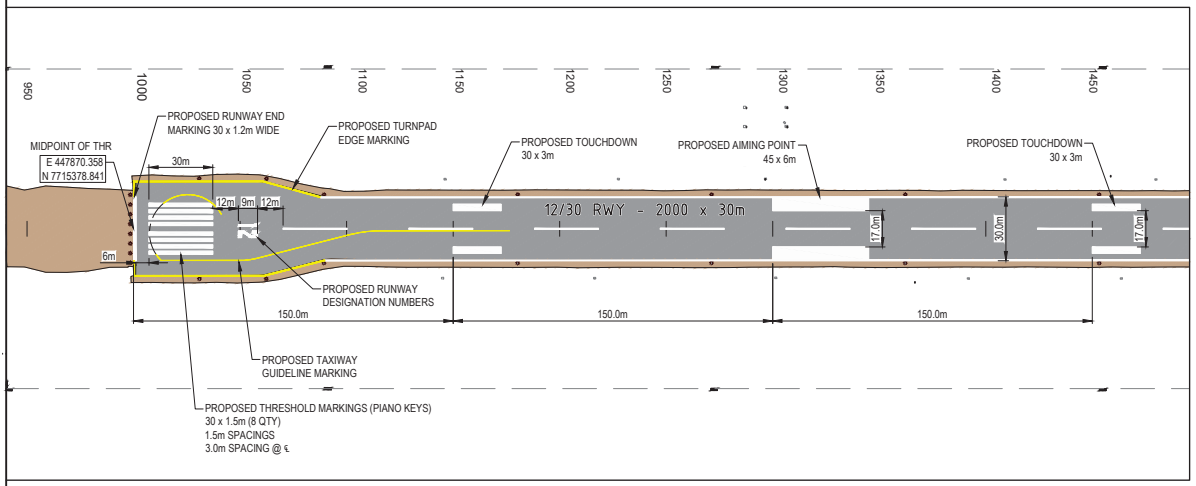
greg@apes.net.au

Appendix 4
Proposed airfield layout and line marking



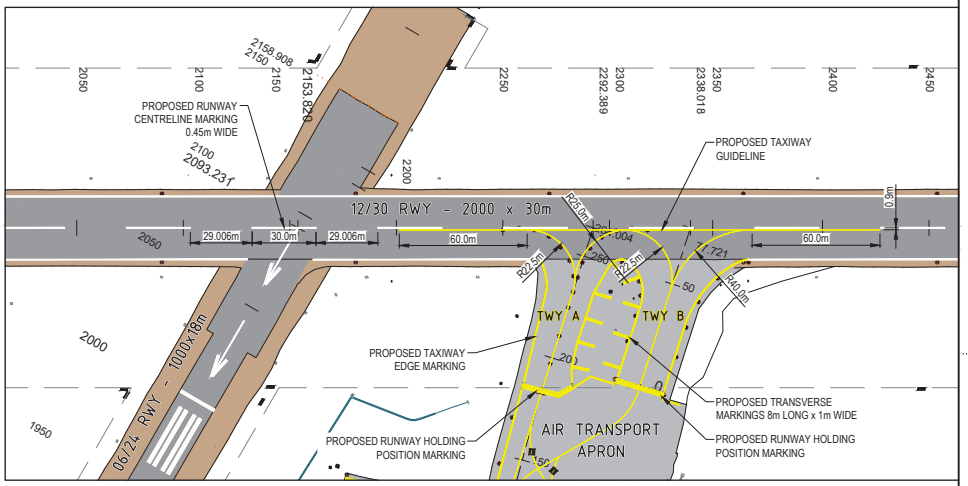
RUNWAY 12/30 - GENERAL LAYOUT

SCALE 1:3000



THRESHOLD 12 DETAIL

SCALE 1:1125



RUNWAY 12-30 / 06 24 & TAXIWAY A & B INTERSECTION

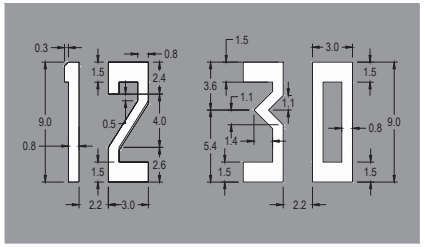
SCALE 1:1125

NOTES:

1. PLAN DRAWN TO GDA20/MGA ZONE 54.
2. LINE MARKING DESIGN IN ACCORDANCE WITH PART 139 (AERODROMES) MANUAL OF STANDARDS 2019.
3. ALL SETOUT LOCATIONS ARE TO BE CONFIRMED ON-SITE USING COORDINATES AND DIMENSIONS PROVIDED PRIOR TO PAINTING.
4. SURVEY SETOUT IS TO BE CARRIED OUT FROM THE SUPPLIED CAD MODEL.
5. ALL NEW PAINT MARKINGS ARE TO BE COMPLIANT WITH THE REQUIREMENTS OF MOS PART 139 (2019).

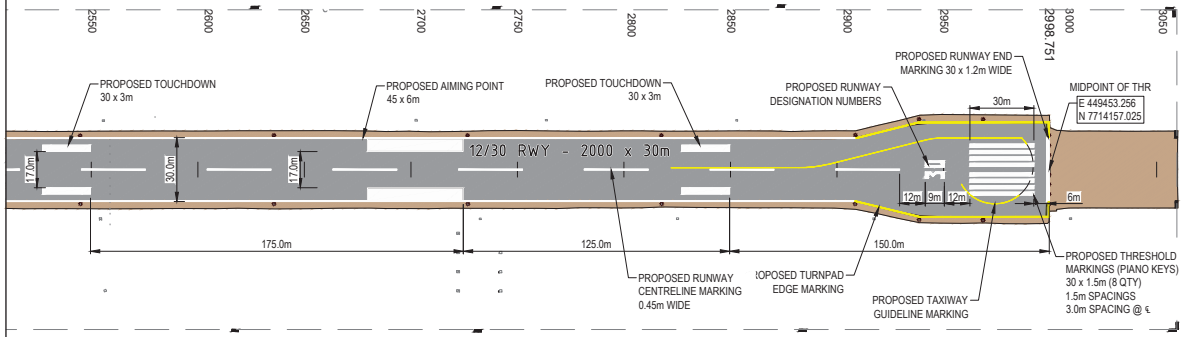
LEGEND

- EXISTING RUNWAY PAVEMENT
- EXISTING TAXIWAY / APRON PAVEMENT
- EXISTING SEALED SHOULDER



RUNWAY DESIGNATION NUMBERS

SCALE 1:200
COLOURED WHITE
NUMBERS SPACED CENTRALLY ABOUT RWY ℄



THRESHOLD 30 DETAIL

SCALE 1:1125

PRELIMINARY
FOR DISCUSSION ONLY

REV	DATE	AMENDMENTS
A	25.09.24	FOR INFORMATION

XREF LIST
Includes: ZSH_A1
Includes: X YCCY SURV GDA20-54
Includes: X YCCY CTRL
Includes: X YCCY LMK DES01 GDA20-54
Includes: X YCCY HAT

Airworks
simon@airworksconsulting.com.au

CLIENT
CLONCURRY SHIRE COUNCIL

DRAWN :	AIRWORKS	25.09.24
DESIGNED :	AIRWORKS	25.09.24
APPROVED:	G.WHITE	
COMPANY :	APES	

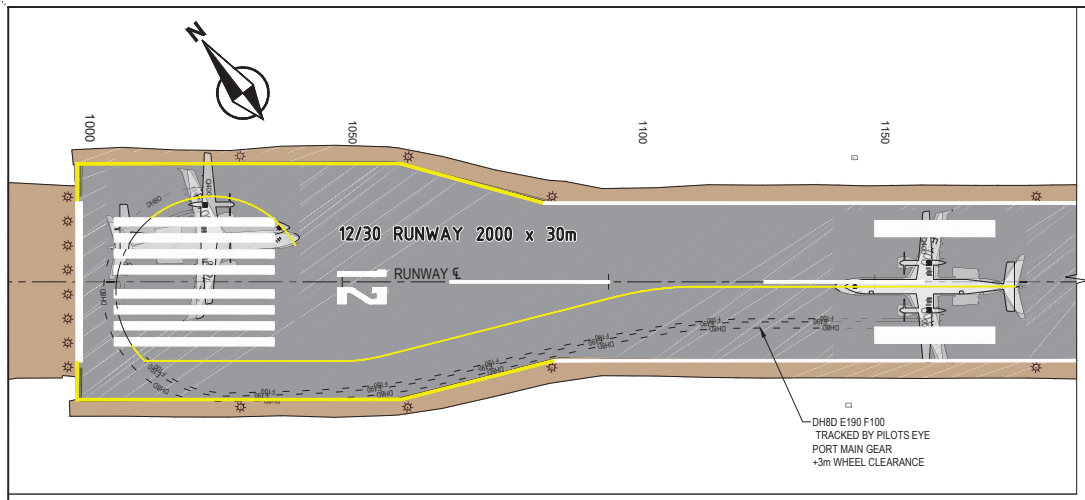
CLONCURRY, QLD
CLONCURRY AIRPORT RESEAL PROJECT
12/30 RUNWAY - LINE MARKING
TITLE: GENERAL ARRANGEMENT & DETAILS

SCALE 1.25 0 1.25 2.5 3.75 5m
A1 SCALE 1:250

DRAWING No. YCCY24AV01
REV A

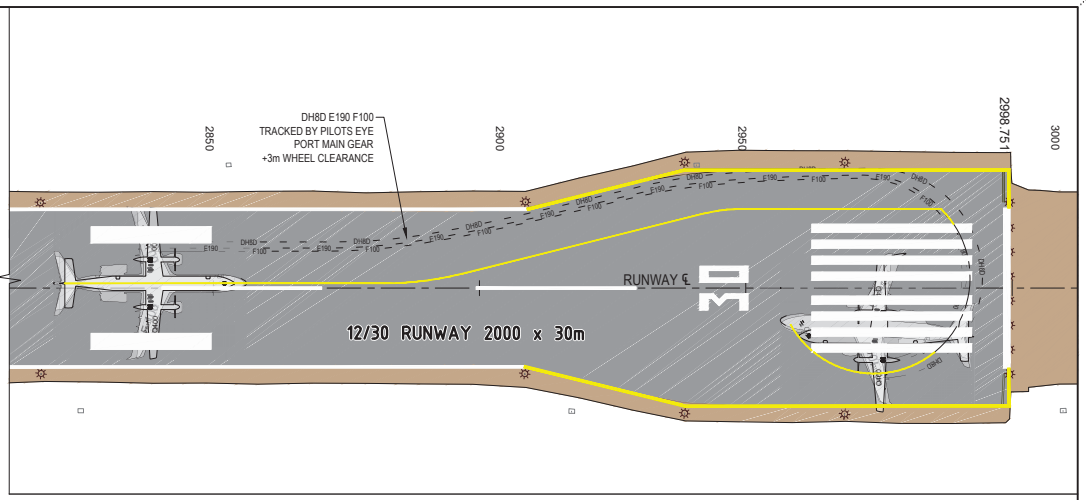
A1 Border

Cad File: E:\Dropbox\zwork\AWX\Jobs 24\240909 Cloncurry - YCCY AD\DRG YCCY24AV01-A RWY12-30.dwg 28-Sep-24 - 05:49:16 PM Plotted By: AIRWORKS



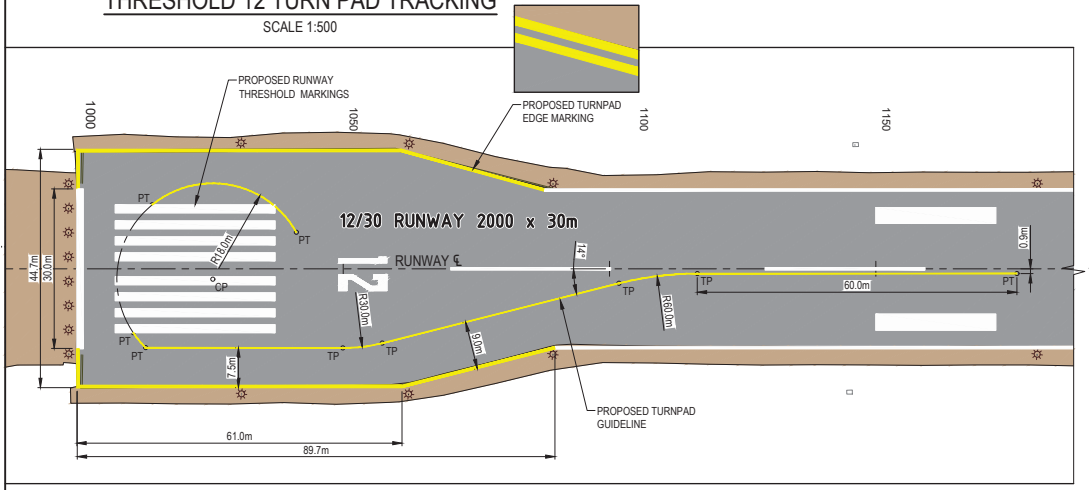
THRESHOLD 12 TURN PAD TRACKING

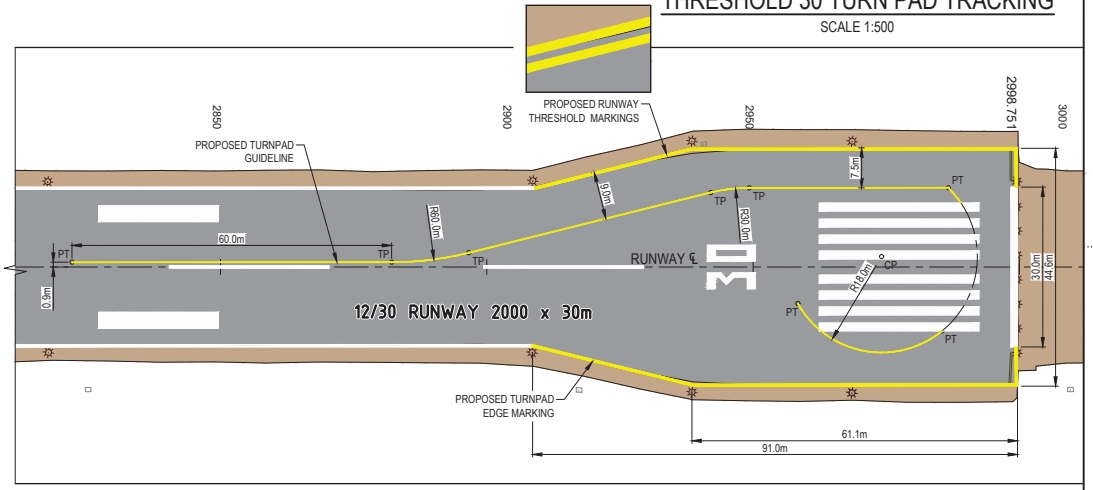
SCALE 1:500



THRESHOLD 30 TURN PAD TRACKING

SCALE 1:500

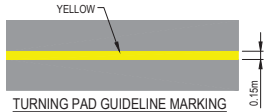




THRESHOLD 12 TURN PAD LINE MARKING

SCALE 1:500

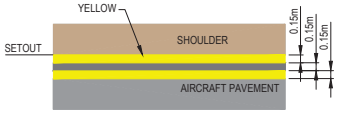
1. TURN PAD LINE NOT MARKED BETWEEN RUNWAY THRESHOLD MARKINGS



TURNING PAD GUIDELINE MARKING

SCALE 1:50

TURNPAD GUIDLINE TERMINATES 0.9m
BEFORE ANY RUNWAY MARKINGS



TURNING PAD EDGE MARKING

SCALE 1:50

NOTES

1. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
2. DESIGN IN ACCORDANCE WITH PART 139 (AERODROMES) MANUAL OF STANDARDS 2019. ALL LINE MARKING & DESIGNATIONS IN ACCORDANCE WITH PART 139 MOS 2019 CHAPTER 8 DIVISION 5.
3. GRID CO-ORDINATES TO MGA/GDA20 ZONE 54 & GEOGRAPHIC CO-ORDINATES TO WGS-84.
4. AIRCRAFT TRACKED BY PILOTS EYE OR COCKPIT ASSUMES THAT COCKPIT CENTRE IS TRACKING DIRECTLY OVER THE LEAD OUT / GUIDELINE AS DETERMINED BY PILOT IN COMMAND. NORMAL COCKPIT RADIUS TURN IS 80% WHEEL ANGLE DEFLECTION.
5. CLIENT TO CONFIRM THAT NO CRITICAL OBJECTS EXISTS WITHIN THE WINGTIP CLEARANCE ZONE AND THAT PAVEMENT STRENGTH IS SUITABLE FOR INTENDED AIRCRAFT OPERATIONS.
6. MINIMUM AIRCRAFT WHEEL TO PAVEMENT EDGE CLEARANCES:
   - DH8D*, E190 & F100 WHEEL TO EDGE = 3m

   *DH8D OPERATES UNDER REGULATORY INSTRUMENT FOR REDUCED MAIN WHEEL CLEARANCES

THRESHOLD 30 TURN PAD LINE MARKING

SCALE 1:500

1. TURN PAD LINE NOT MARKED BETWEEN RUNWAY THRESHOLD MARKINGS

AIRCRAFT	ICAO	SPAN	LENGTH	HEIGHT	COCKPIT 80% TURN RAD	W/BASE	OMGWS
DASH 8-400	DH8D	28.42	32.83	8.38	16.35	13.94	9.55
EMBRAER 190	E190	28.72	36.24	10.57	17.27	13.82	7.22
FOKKER 100	F100	28.08	35.53	8.63	16.45	14.01	6.05

LEGEND

- EXISTING RUNWAY PAVEMENT
- EXISTING TAXIWAY / APRON PAVEMENT
- EXISTING SEALED SHOULDER
- PT TP — INTERSECTION OR TANGENT POINT
- CP — CENTRE POINT

PRELIMINARY
FOR DISCUSSION ONLY

REV	DATE	AMENDMENTS
A	25.09.24	FOR INFORMATION

XREF LIST
Includes: ZSH_A1
Includes: X YCCY SURV GDA20-54
Includes: X YCCY CTRL
Includes: X YCCY LMK DES01 GDA20-54
Includes: X YCCY HAT
Includes: X YCCY TRK DES01 GDA20-54

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CLIENT
CLONCURRY SHIRE COUNCIL

DRAWN :	AIRWORKS	25.09.24
DESIGNED :	AIRWORKS	25.09.24
APPROVED:	G.WHITE	
COMPANY :	APES	

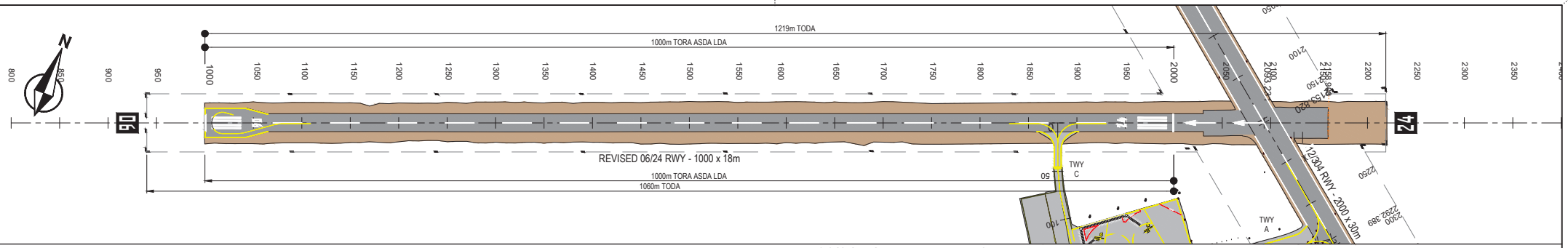
TITLE
CLONCURRY, QLD
CLONCURRY AIRPORT RESEAL PROJECT
12/30 RUNWAY - THRESHOLD TURN PADS
GENERAL ARRANGEMENT & DETAILS

SCALE 5 0 5 10 15 20m
A1 SCALE 1:500

DRAWING No. YCCY24AV02
REV A

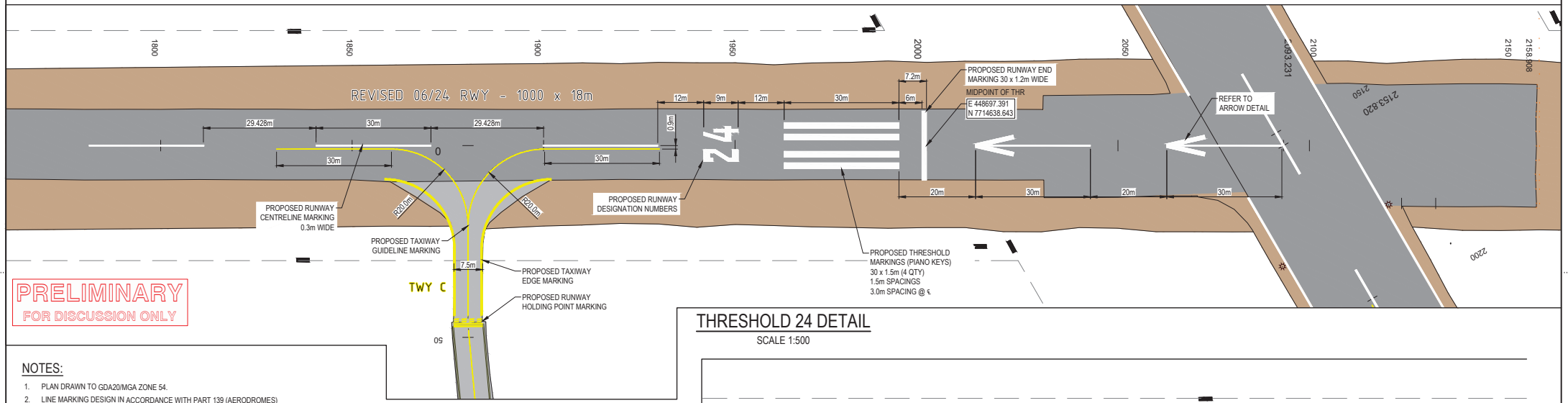
A1 Border

Cad File: E:\Dropbox\zwork\AWX\Jobs 24\240909 Cloncurry - YCCY AD\DRG YCCY24AV02-A TPD12-30.dwg 28-Sep-24 - 05:47:11 PM Plotted By: AIRWORKS



RUNWAY 06/24 - GENERAL LAYOUT

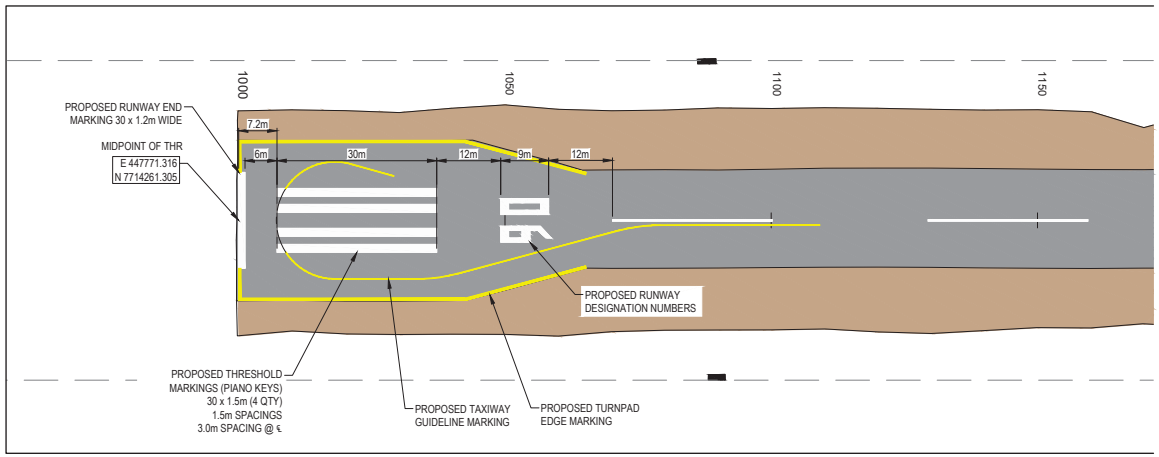
SCALE 1:2000



PRELIMINARY
FOR DISCUSSION ONLY

THRESHOLD 24 DETAIL

SCALE 1:500



THRESHOLD 06 DETAIL

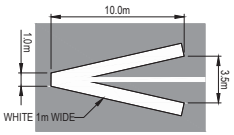
SCALE 1:500

NOTES:

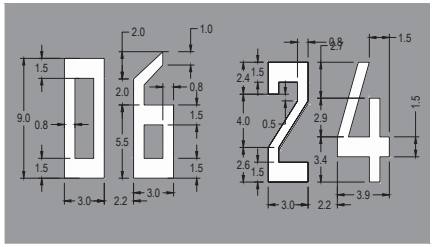
1. PLAN DRAWN TO GDA20/MGA ZONE 54.
2. LINE MARKING DESIGN IN ACCORDANCE WITH PART 139 (AERODROMES) MANUAL OF STANDARDS 2019.
3. ALL SETOUT LOCATIONS ARE TO BE CONFIRMED ON-SITE USING COORDINATES AND DIMENSIONS PROVIDED PRIOR TO PAINTING.
4. SURVEY SETOUT IS TO BE CARRIED OUT FROM THE SUPPLIED CAD MODEL.
5. ALL NEW PAINT MARKINGS ARE TO BE COMPLIANT WITH THE REQUIREMENTS OF MOS PART 139 (2019).

LEGEND

- EXISTING RUNWAY PAVEMENT
- EXISTING TAXIWAY / APRON PAVEMENT
- EXISTING SEALED SHOULDER



PERMANENTLY DISPLACED ARROW HEAD DETAIL
SCALE 1:200
COLOURED WHITE



RUNWAY DESIGNATION NUMBERS
SCALE 1:200
COLOURED WHITE
NUMBERS SPACED CENTRALLY ABOUT RWY ℄

REV	DATE	AMENDMENTS
A	25.09.24	FOR INFORMATION

XREF LIST
Includes: ZSH_A1
Includes: X YCCY SURV GDA20-54
Includes: X YCCY CTRL
Includes: X YCCY LMK DES01 GDA20-54
Includes: X YCCY HAT

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CLONCURRY SHIRE COUNCIL

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DESIGNED :	AIRWORKS	25.09.24
APPROVED:	G.WHITE	
COMPANY :	APES	

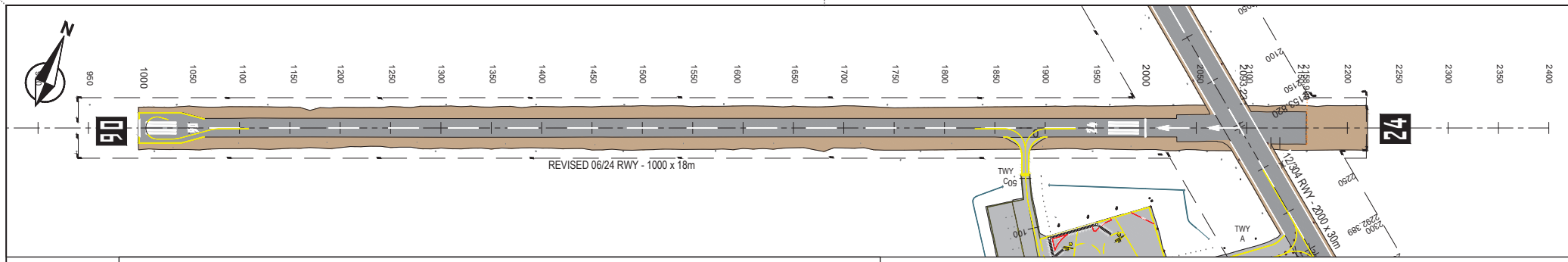
TITLE
CLONCURRY, QLD
CLONCURRY AIRPORT RESEAL PROJECT
06/24 RUNWAY - LINE MARKING
GENERAL ARRANGEMENT & DETAILS

SCALE 1.25 0 1.25 2.5 3.75 5m
A1 SCALE 1:1250

DRAWING No. YCCY24AV03
REV A

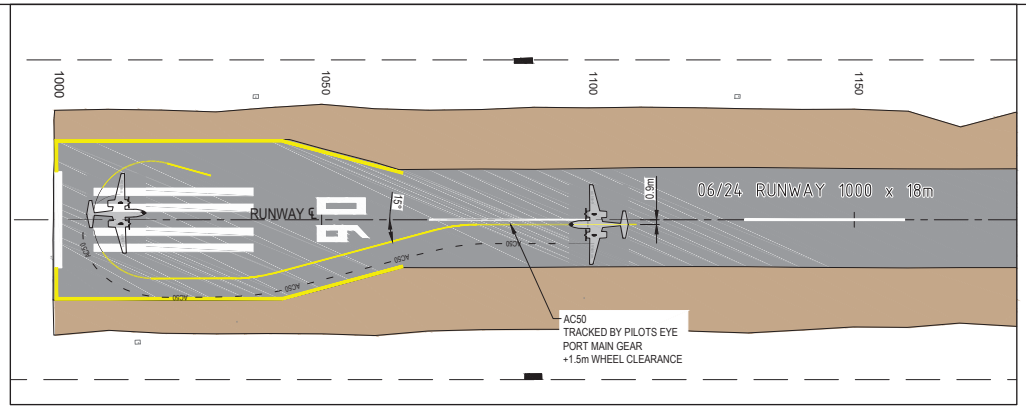
A1 Border

Cad File: E:\Dropbox\zwork\AWX\Jobs 24\240909 Cloncurry - YCCY AD\DRG YCCY24AV03-A RWY06-24.dwg 28-Sep-24 - 05:44:46 PM Plotted By: AIRWORKS



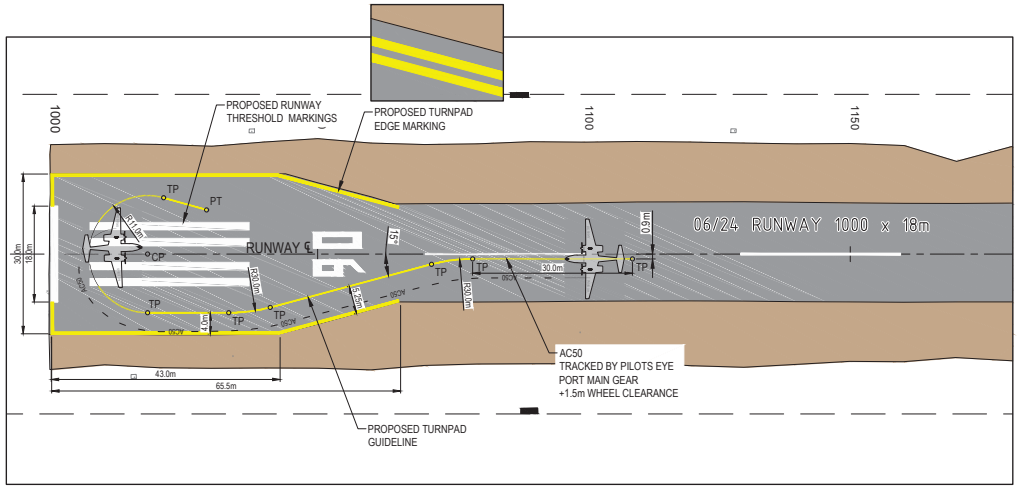
RUNWAY 06/24 - GENERAL LAYOUT

SCALE 1:2000



THRESHOLD 06 TURN PAD TRACKING

SCALE 1:500



THRESHOLD 06 TURN PAD LINE MARKING

SCALE 1:500

1. TURN PAD LINE NOT MARKED BETWEEN RUNWAY THRESHOLD MARKINGS

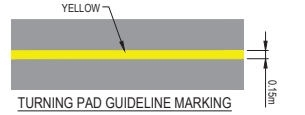
NOTES

1. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
2. DESIGN IN ACCORDANCE WITH PART 139 (AERODROMES) MANUAL OF STANDARDS 2019. ALL LINE MARKING & DESIGNATIONS IN ACCORDANCE WITH PART 139 MOS 2019 CHAPTER 8 DIVISION 5.
3. GRID CO-ORDINATES TO MGA/GDA20 ZONE 54 & GEOGRAPHIC CO-ORDINATES TO WGS-84.
4. AIRCRAFT TRACKED BY PILOTS EYE OR COCKPIT ASSUMES THAT COCKPIT CENTRE IS TRACKING DIRECTLY OVER THE LEAD OUT / GUIDELINE AS DETERMINED BY PILOT IN COMMAND. NORMAL COCKPIT RADIUS TURN IS 80% WHEEL ANGLE DEFLECTION.
5. CLIENT TO CONFIRM THAT NO CRITICAL OBJECTS EXISTS WITHIN THE WINGTIP CLEARANCE ZONE AND THAT PAVEMENT STRENGTH IS SUITABLE FOR INTENDED AIRCRAFT OPERATIONS.
6. MINIMUM AIRCRAFT WHEEL TO PAVEMENT EDGE CLEARANCES:
   - AC50 WHEEL TO EDGE = 1.5m

AIRCRAFT	ICAO	SPAN	LENGTH	HEIGHT	COCKPIT 80% TURN RAD	W/BASE	OMGWS
AEROCOMMANDER	AC50	14.95	11.15	4.42	3.67	4.26	4.14

LEGEND

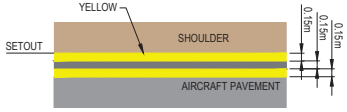
- EXISTING RUNWAY PAVEMENT
- EXISTING TAXIWAY / APRON PAVEMENT
- EXISTING SEALED SHOULDER
- PT, TP — INTERSECTION OR TANGENT POINT
- CP — CENTRE POINT



TURNING PAD GUIDELINE MARKING

SCALE 1:50

TURNPAD GUIDLINE TERMINATES 0.9m BEFORE ANY RUNWAY MARKINGS



TURNING PAD EDGE MARKING

SCALE 1:50

PRELIMINARY
FOR DISCUSSION ONLY

REV	DATE	AMENDMENTS
A	25.09.24	FOR INFORMATION

XREF LIST

Includes: ZSH_A1
Includes: X YCCY SURV GDA20-54
Includes: X YCCY CTRL
Includes: X YCCY HAT
Includes: X YCCY LMK DES01 GDA20-54
Includes: X YCCY TRK DES01 GDA20-54

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CLIENT: CLONCURRY SHIRE COUNCIL

DRAWN :	AIRWORKS	25.09.24
DESIGNED :	AIRWORKS	25.09.24
APPROVED:	G.WHITE	
COMPANY :	APES	

TITLE: CLONCURRY, QLD
CLONCURRY AIRPORT RESEAL PROJECT
06/24 RUNWAY - THRESHOLD TURN PAD
TRACKING & LINE MARKING

SCALE 5 0 5 10 15 20m
A1 SCALE 1:500

DRAWING No. YCCY24AV04
REV A

A1 Border

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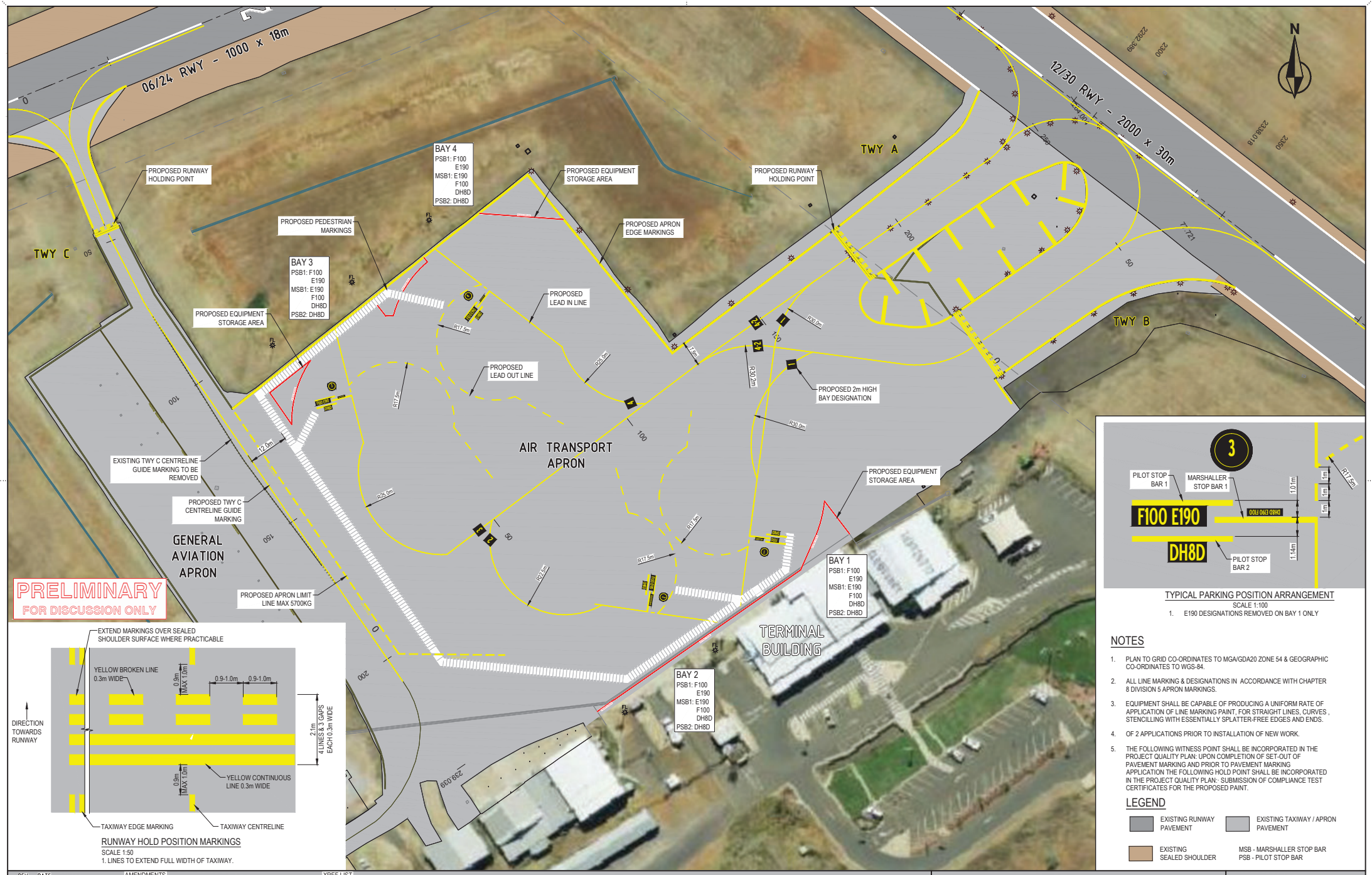

RUNWAY HOLD POSITION MARKINGS
SCALE 1:50
1. LINES TO EXTEND FULL WIDTH OF TAXIWAY.

TYPICAL PARKING POSITION ARRANGEMENT
SCALE 1:100
1. E190 DESIGNATIONS REMOVED ON BAY 1 ONLY

NOTES

1. PLAN TO GRID CO-ORDINATES TO MGA/GDA20 ZONE 54 & GEOGRAPHIC CO-ORDINATES TO WGS-84.
2. ALL LINE MARKING & DESIGNATIONS IN ACCORDANCE WITH CHAPTER 8 DIVISION 5 APRON MARKINGS.
3. EQUIPMENT SHALL BE CAPABLE OF PRODUCING A UNIFORM RATE OF APPLICATION OF LINE MARKING PAINT, FOR STRAIGHT LINES, CURVES , STENCILLING WITH ESSENTIALLY SPLATTER-FREE EDGES AND ENDS.
4. OF 2 APPLICATIONS PRIOR TO INSTALLATION OF NEW WORK.
5. THE FOLLOWING WITNESS POINT SHALL BE INCORPORATED IN THE PROJECT QUALITY PLAN: UPON COMPLETION OF SET-OUT OF PAVEMENT MARKING AND PRIOR TO PAVEMENT MARKING APPLICATION THE FOLLOWING HOLD POINT SHALL BE INCORPORATED IN THE PROJECT QUALITY PLAN: SUBMISSION OF COMPLIANCE TEST CERTIFICATES FOR THE PROPOSED PAINT.

LEGEND

- EXISTING RUNWAY PAVEMENT
- EXISTING TAXIWAY / APRON PAVEMENT
- EXISTING SEALED SHOULDER
- MSB - MARSHALLER STOP BAR
- PSB - PILOT STOP BAR

REV	DATE	AMENDMENTS
A	25.09.24	FOR INFORMATION

XREF LIST
Includes: ZSH_A1
Includes: X YCCY SURV GDA20-54
Includes: X YCCY CTRL
Includes: X YCCY HAT
Includes: X YCCY LMK DES01 GDA20-54
Includes: X YCCY IMG
Includes: CLONCURRY AIRPORT EXISTING SURFACE AND FEATURES GDA2020
Images: X IMG YCCY ATA.JPG

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CLIENT
CLONCURRY SHIRE COUNCIL

DRAWN :	AIRWORKS	25.09.24
DESIGNED :	AIRWORKS	25.09.24
APPROVED:	G.WHITE	
COMPANY :	APES	

TITLE
CLONCURRY, QLD
CLONCURRY AIRPORT RESEAL PROJECT
AIR TRANSPORT & GENERAL AVIATION APRON
LINE MARKING

SCALE 5 0 5 10 15 20m
A1 SCALE 1:500

DRAWING No. YCCY24AV06
REV A

A1 Border

Cad File: E:\Dropbox\zwork\AWX\Jobs 24\240909 Cloncurry - YCCY AD\DRG YCCY24AV06-A ATA LMK.dwg 2-Oct-24 - 05:47:11 PM Plotted By: AIRWORKS

Airport Pavement Engineering Specialists Pty Ltd
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+61 400 218 048
greg@apes.net.au

Appendix 5
APSDS Pavement Analysis Output Files

RPT Pavements
Existing Structure
Subgrade CBR 3

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2087.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr3 - dependent	Iso.	3.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr3 - dependent	Total			9.55E+07
			Dash 8-Q400	29.35	3.85E-03	1.10E+06
			EMBRAER190 STD	47.95	5.15E-03	4.76E+06
			F100	45.80	5.35E-03	9.12E+07

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr5 - dependent	Iso.	5.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr5 - dependent	Total			1.09E+05
			Dash 8-Q400	29.35	2.55E-03	1.39E+03
			EMBRAER190 STD	47.95	3.43E-03	6.33E+03
			F100	45.80	3.53E-03	1.03E+05

RPT Pavements
Existing Structure
Subgrade CBR 8

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr8 - dependent	Iso.	8.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr8 - dependent	Total			4.27E+02
			Dash 8-Q400	29.35	1.75E-03	5.54E+00
			EMBRAER190 STD	47.95	2.37E-03	2.88E+01
			F100	45.80	2.41E-03	4.01E+02

RPT Pavements
Existing Structure
Subgrade CBR 10

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr10 - dependent	Iso.	1.00E+02	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr10 - dependent	Total			4.14E+01
			Dash 8-Q400	29.35	1.46E-03	5.02E-01
			EMBRAER190 STD	47.95	1.99E-03	3.01E+00
			F100	45.80	2.01E-03	3.87E+01

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr12 - dependent	Iso.	1.20E+02	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr12 - dependent	Total			6.22E+00
			Dash 8-Q400	29.35	1.26E-03	6.62E-02
			EMBRAER190 STD	47.95	1.72E-03	4.84E-01
			F100	45.80	1.74E-03	5.79E+00

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
   Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
   Reservoir Method

Traffic Spectrum Details:

   ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

   ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr15 - dependent	Iso.	1.50E+02	0.40			

   Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

   Reliability Factors: Not Used.

   Details of Layers to be sublayered:
   Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr15 - dependent	Total			3.25E-01
			Dash 8-Q400	29.35	1.06E-03	2.44E-03
			EMBRAER190 STD	47.95	1.45E-03	2.77E-02
			F100	45.80	1.45E-03	3.00E-01

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 1 Title: Cloncurry - High - Existing

Load No.	Load ID	Movements
1	Dash 8-Q400	3.05E+04
2	EMBRAER190 STD	4.96E+03
3	F100	4.00E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 1 Title: Cloncurry - Heavy - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr20 - dependent	Iso.	2.00E+02	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	40.00	Asph1380			n/a	n/a
2	300.00	BBBase			n/a	n/a
3	0.00	cbr20 - dependent	Total			2.29E-05
			Dash 8-Q400	29.35	8.39E-04	5.87E-08
			EMBRAER190 STD	47.95	1.15E-03	2.28E-06
			F100	45.80	1.15E-03	2.09E-05

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 3 Title: Cloncurry - Low

Load No.	Load ID	Movements
1	KA 350	1.43E+04
2	KA B200	1.43E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 5 Title: Cloncurry - Light - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr3 - dependent	Iso.	3.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	30.00	Asph1380			n/a	n/a
2	220.00	BBBase			n/a	n/a
3	0.00	cbr3 - dependent	Total			3.18E+02
			KA 350	6.85	2.15E-03	2.83E+02
			KA B200	5.71	1.82E-03	3.49E+01

GA Pavements
Existing Structure
Subgrade CBR 5

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 3 Title: Cloncurry - Low

Load No.	Load ID	Movements
1	KA 350	1.43E+04
2	KA B200	1.43E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 5 Title: Cloncurry - Light - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr5 - dependent	Iso.	5.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	30.00	Asph1380			n/a	n/a
2	220.00	BBBase			n/a	n/a
3	0.00	cbr5 - dependent	Total			2.91E-01
			KA 350	6.85	1.39E-03	2.59E-01
			KA B200	5.71	1.18E-03	3.24E-02

GA Pavements
Existing Structure
Subgrade CBR 8

APSDS Version 5.0u (1 June 2022)

y-coordinate for results (Y): 0

Locations for Damage Calculations:
Top of layer no. 3
Job Title: Cloncurry

Damage Factor Calculation

Standard Deviation of Wander: 773
Interval between result points along X-axis (XWDEL): 100
Upper range for approximation of statistics (XWMAX): 2100.1

Minimum x-coordinate for results (XMIN): 0
Maximum x-coordinate for results (XMAX): 10000

Assumed number of damage pulses per movement:
Reservoir Method

Traffic Spectrum Details:

ID: Cloncurry 3 Title: Cloncurry - Low

Load No.	Load ID	Movements
1	KA 350	1.43E+04
2	KA B200	1.43E+04

N.B. Full details of Load Groups will be provided in a future release.

Details of Layered System:

ID: Cloncurry 5 Title: Cloncurry - Light - Existing

Layer No.	Lower i/face	Material ID	Isotropy	Modulus (or Ev)	P.Ratio (or vvh)	F	Eh	vh
1	rough	Asph1380	Iso.	1.38E+03	0.35			
2	rough	BBBase	Iso.	0.00E+00	0.30			
3	rough	cbr8 - dependent	Iso.	8.00E+01	0.40			

Performance Relationships:

Layer No.	Location	Performance ID	Component	Perform. Constant	Perform. Exponent	Traffic Multiplier
3	top	Calibr_2010	EZZ	0.000000	0.000	1.000

Reliability Factors: Not Used.

Details of Layers to be sublayered:
Layer no. 2: Barker-Brabston sublayering

Results:

Layer No.	Thickness	Material ID	Load ID	Gross Weight	Critical Strain	CDF
1	30.00	Asph1380			n/a	n/a
2	220.00	BBBase			n/a	n/a
3	0.00	cbr8 - dependent	Total			7.09E-04
			KA 350	6.85	9.32E-04	6.33E-04
			KA B200	5.71	7.92E-04	7.62E-05

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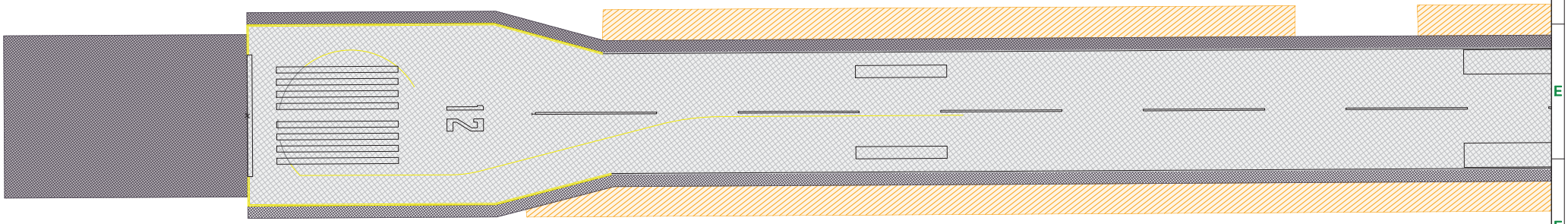
Appendix 6
Pavement type plans

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

CH 740 CH 760 CH 780 CH 800 CH 820 CH 840 CH 860 CH 880 CH 900 CH 920 CH 940 CH 960 CH 980 CH 1000 CH 1020 CH 1040 CH 1060 CH 1080 CH 1100 CH 1120



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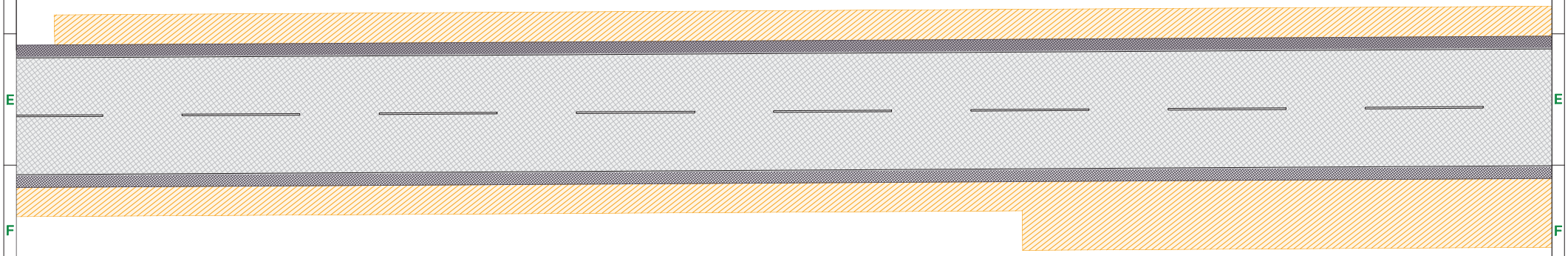
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-TYPE-01

Plot Wed Nov 13 13:50:13 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS



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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-TYPE-02

Plot Wed Nov 13 13:49:56 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

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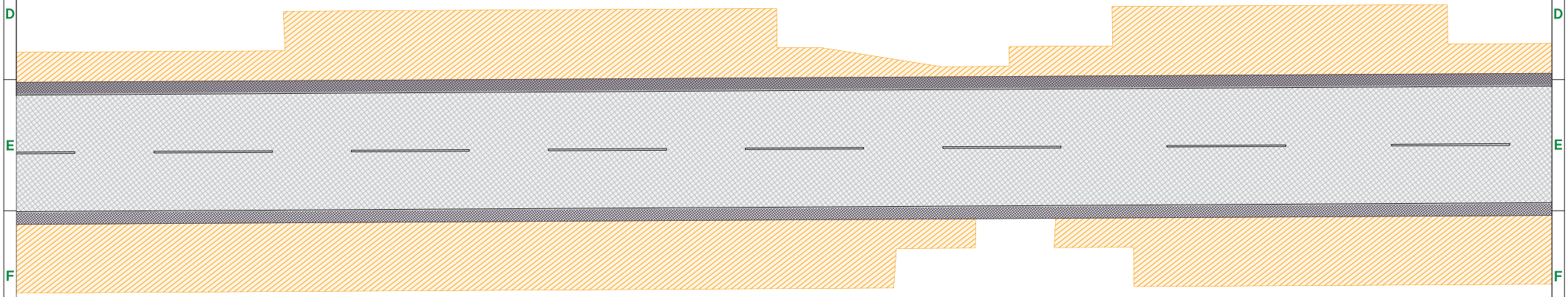

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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES

SCALE: 1: 500 | DRAWING NAME: PS-CLONC-TYPE-03

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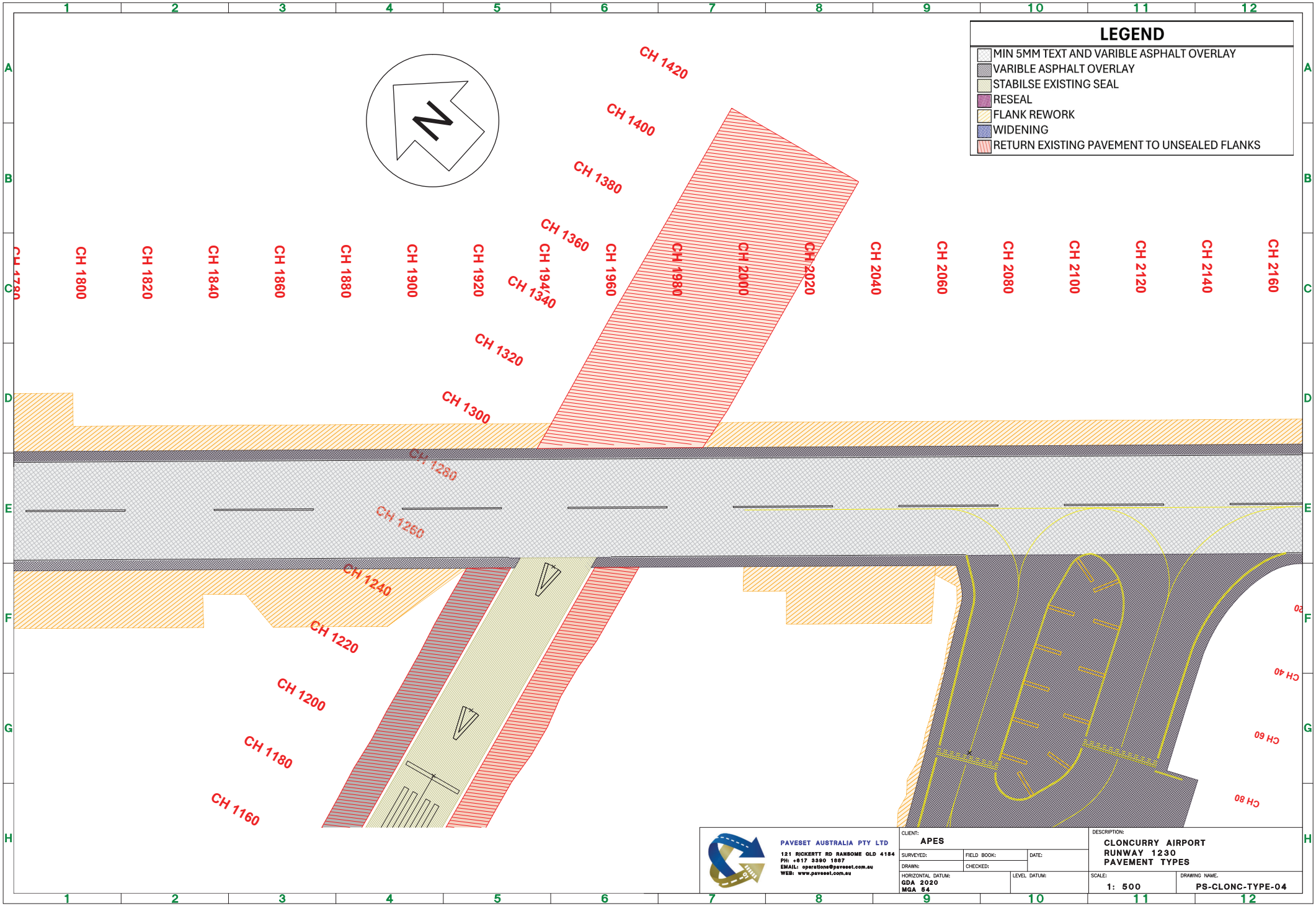

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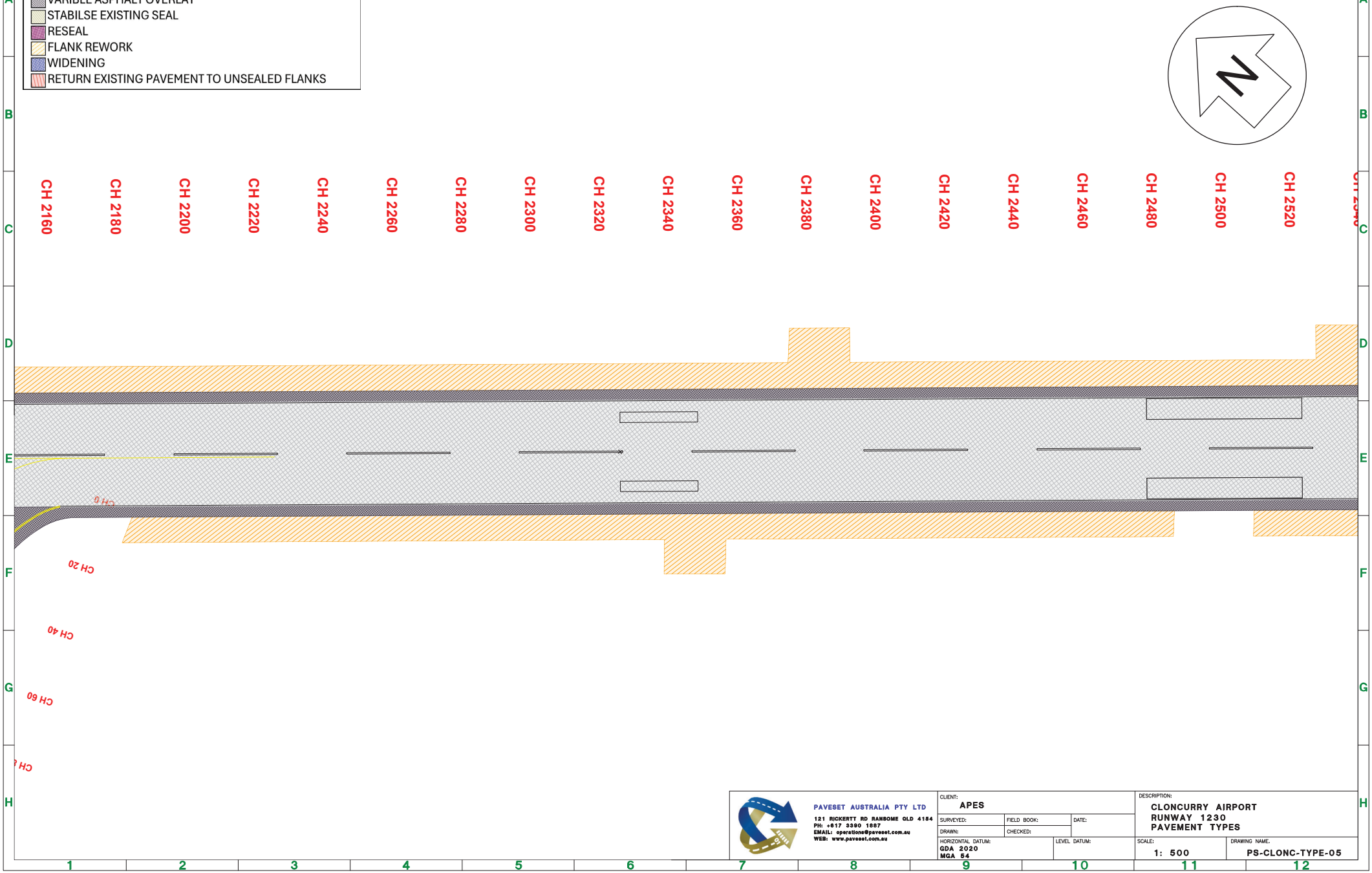
CLIENT: APES
SURVEYED: | FIELD BOOK: | DATE:
DRAWN: | CHECKED:
HORIZONTAL DATUM: GDA 2020 MGA 54
LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES
SCALE: 1: 500
DRAWING NAME: PS-CLONC-TYPE-04

Plot Wed Nov 13 13:49:21 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES

SCALE: 1: 500

DRAWING NAME. PS-CLONC-TYPE-05

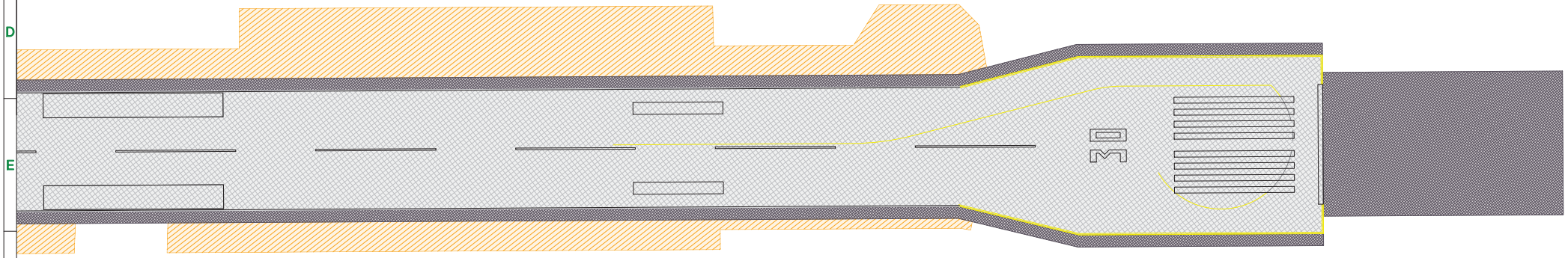
Plot Wed Nov 13 13:49:06 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

CH 2480 CH 2500 CH 2520 CH 2540 CH 2560 CH 2580 CH 2600 CH 2620 CH 2640 CH 2660 CH 2680 CH 2700 CH 2720 CH 2740 CH 2760 CH 2780 CH 2800 CH 2820 CH 2840 CH 2860



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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 PAVEMENT TYPES
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-TYPE-06

Plot Wed Nov 13 13:48:46 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

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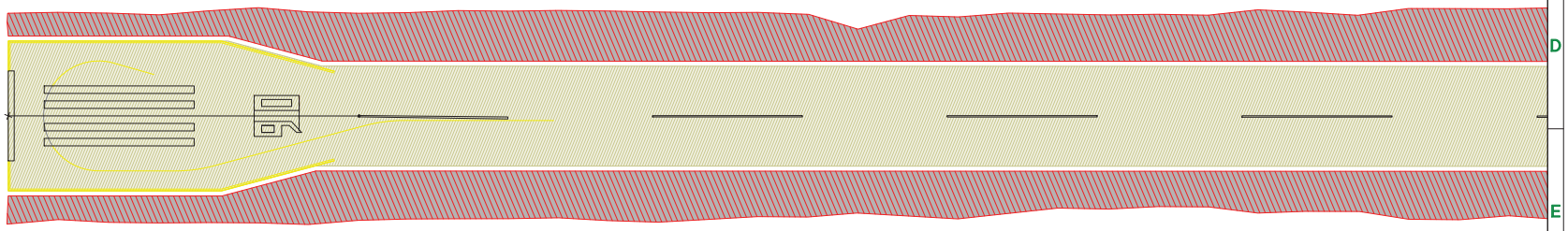

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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 PAVEMENT TYPES
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-TYPE-01

Plot Wed Nov 13 13:36:05 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

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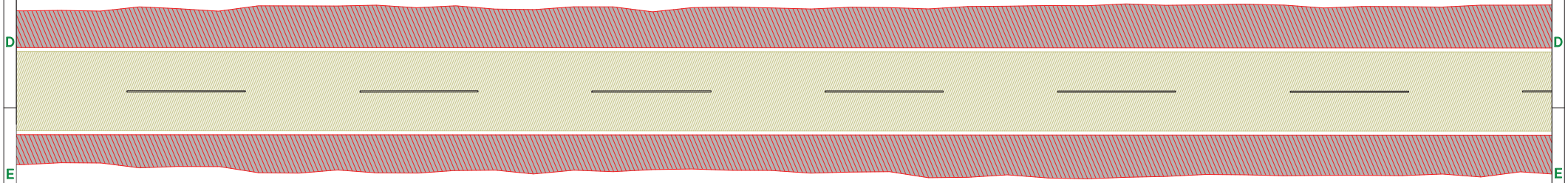

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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 PAVEMENT TYPES

SCALE: 1: 500 | DRAWING NAME: PS-CLONC-TYPE-02

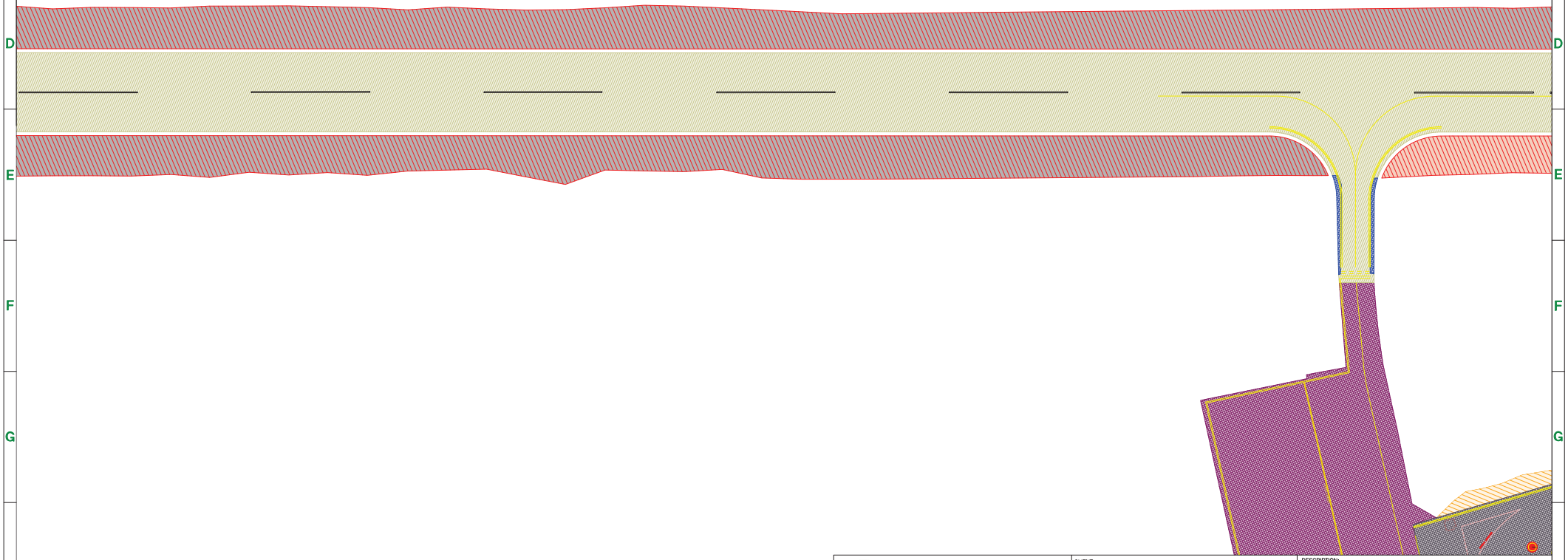
Plot Wed Nov 13 13:39:01 2024

LEGEND

- MIN 5MM TEXT AND VARIBLE ASPHALT OVERLAY
- VARIBLE ASPHALT OVERLAY
- STABILSE EXISTING SEAL
- RESEAL
- FLANK REWORK
- WIDENING
- RETURN EXISTING PAVEMENT TO UNSEALED FLANKS

N

CH 740 CH 760 CH 780 CH 800 CH 820 CH 840 CH 860 CH 880 CH 900 CH 920 CH 940 CH 960 CH 980 CH 1000 CH 1020 CH 1040 CH 1060 CH 1080 CH 1100 CH 1120



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SURVEYED: | FIELD BOOK: | DATE:
DRAWN: | CHECKED:
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 PAVEMENT TYPES

SCALE: 1: 500

DRAWING NAME: PS-CLONC-TYPE-03

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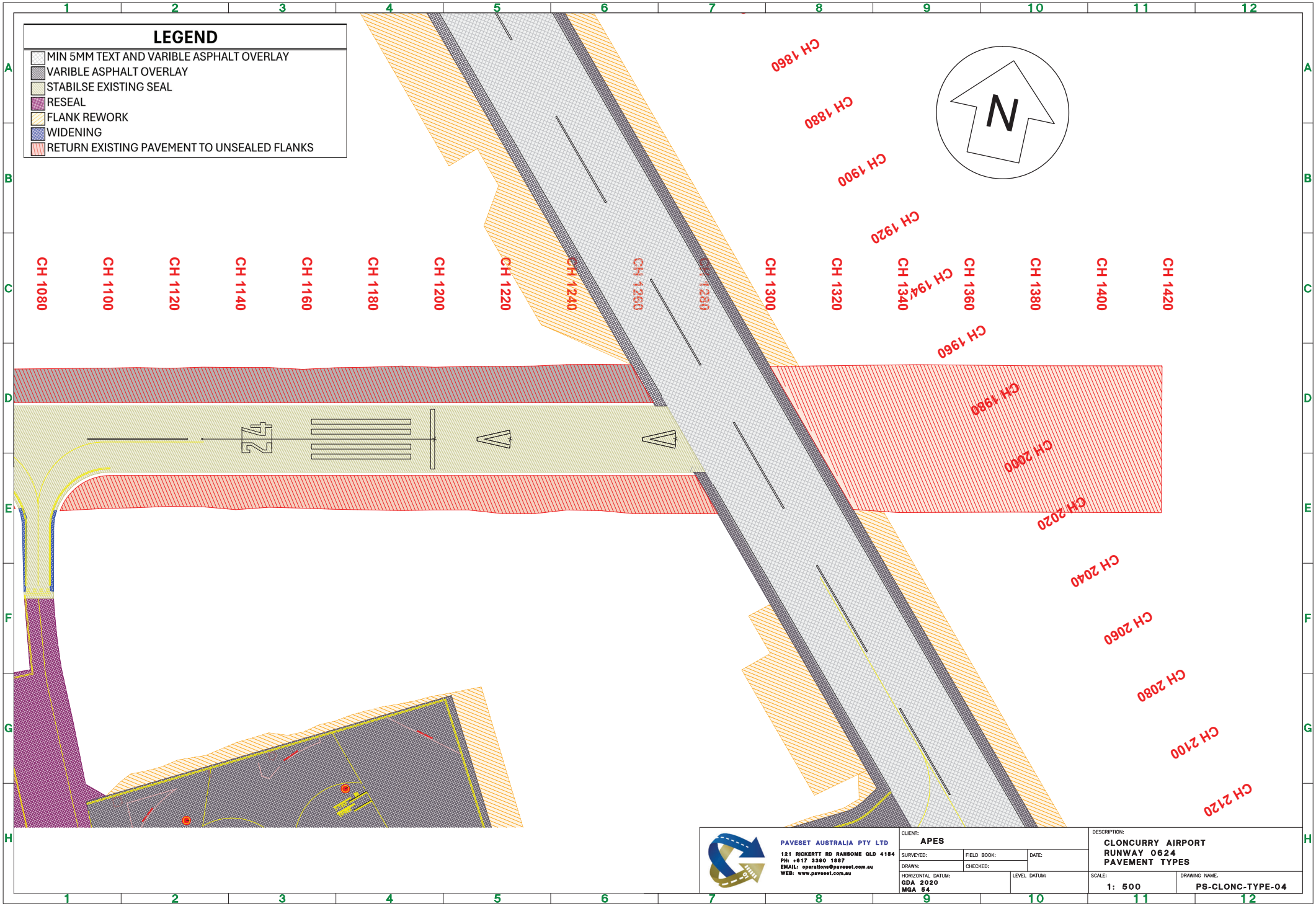

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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:
DRAWN: | CHECKED:
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 PAVEMENT TYPES

SCALE: 1: 500

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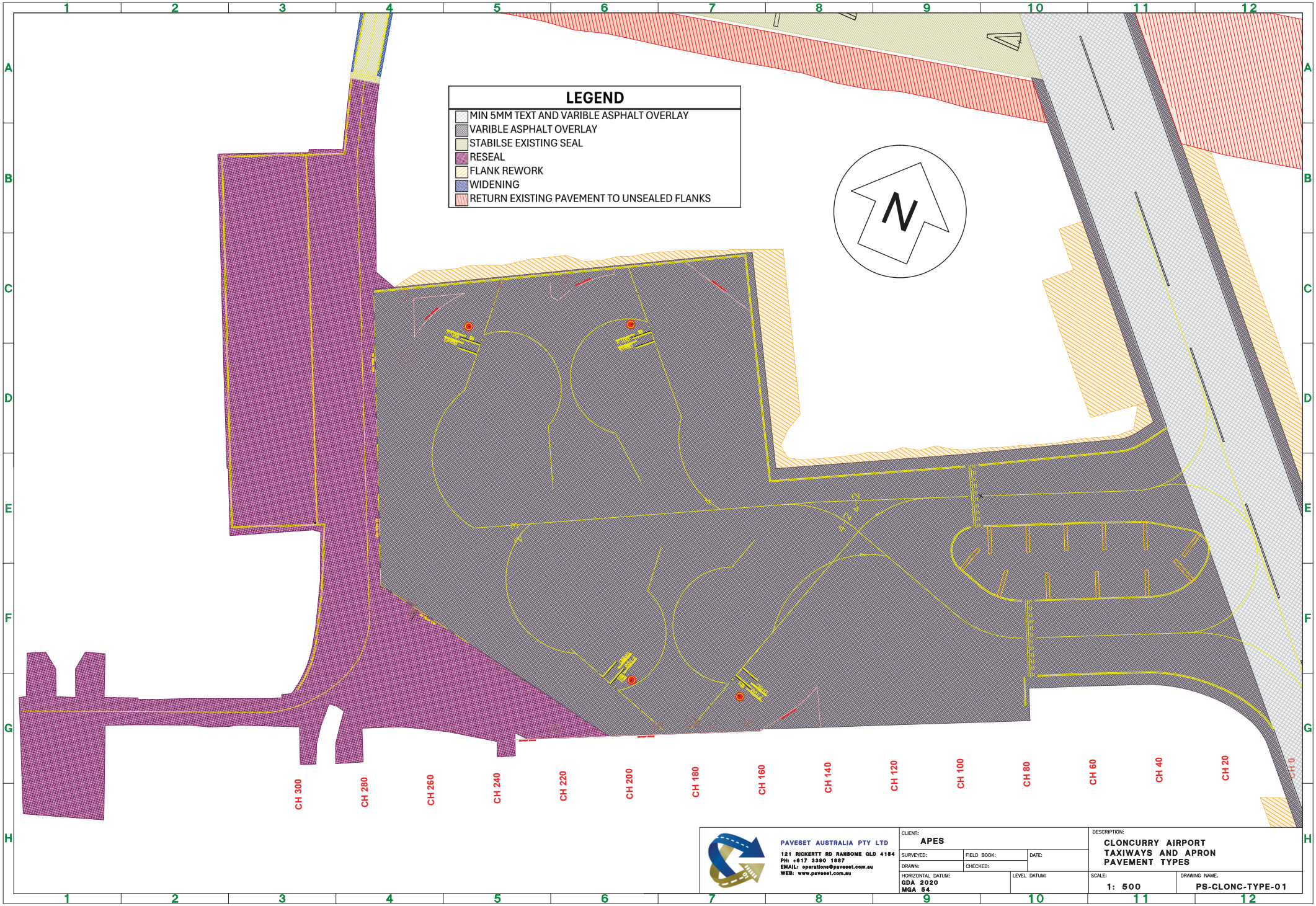

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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT TAXIWAYS AND APRON PAVEMENT TYPES
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-TYPE-01

Plot Wed Nov 13 13:34:51 2024

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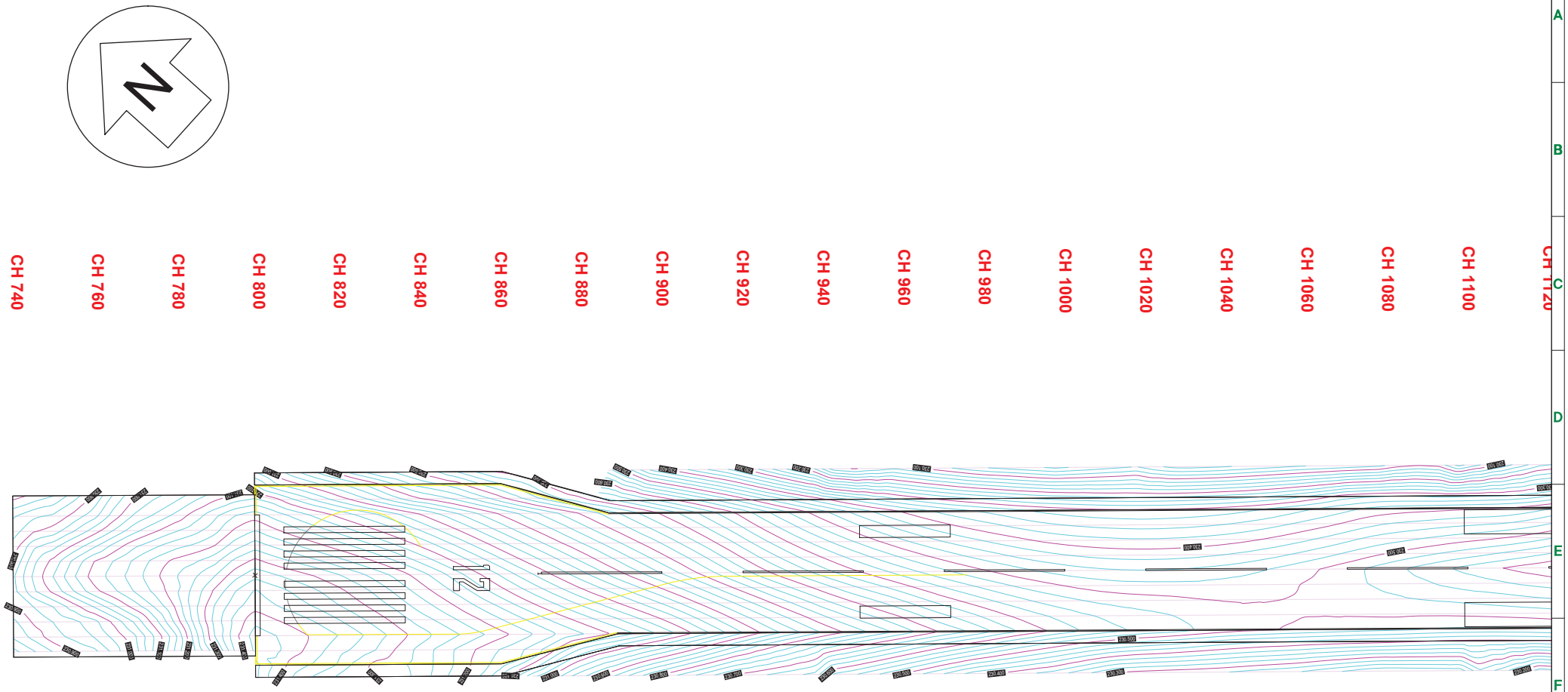
Appendix 7
Design surface contours



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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
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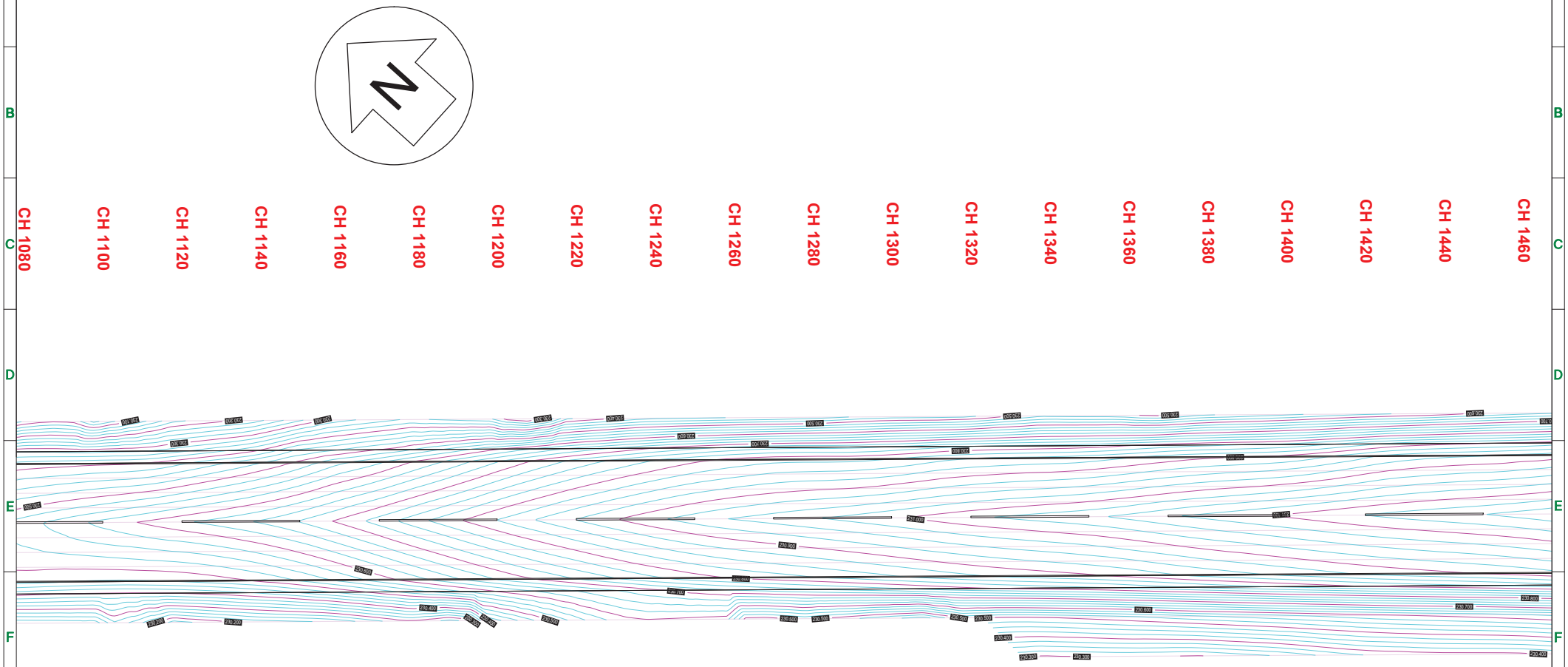

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CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
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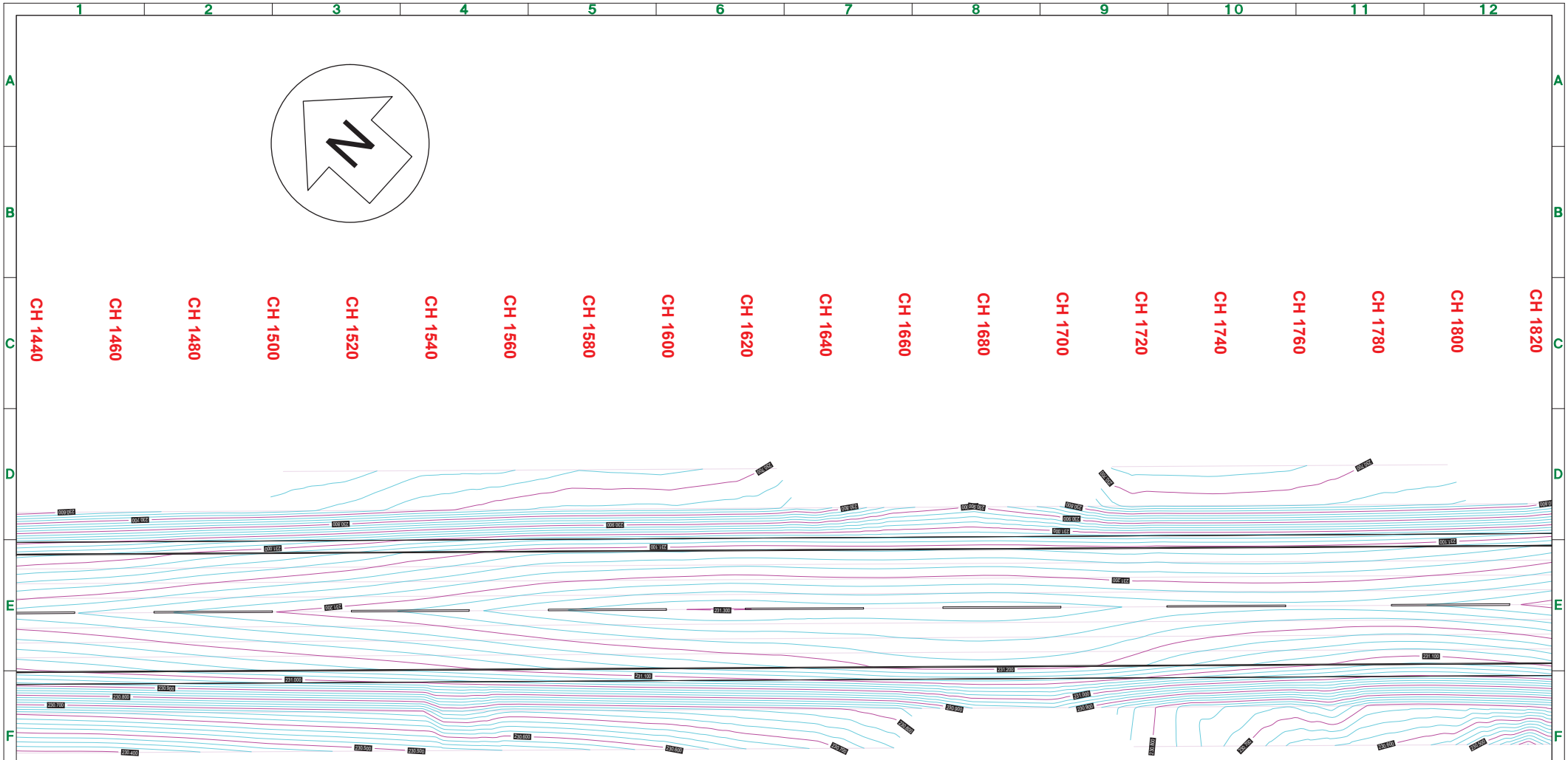

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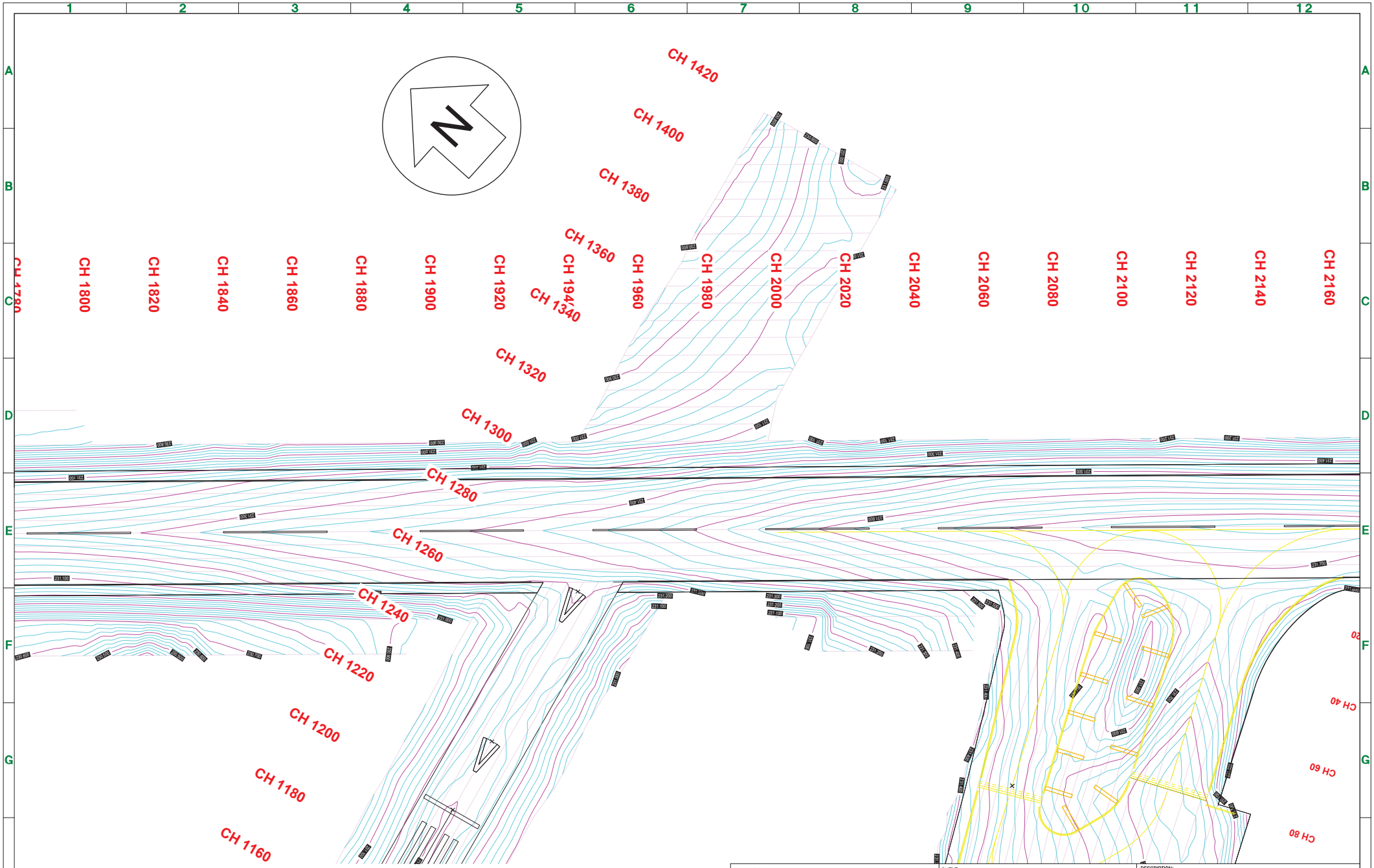
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-DES-03

Plot Wed Nov 13 13:17:21 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

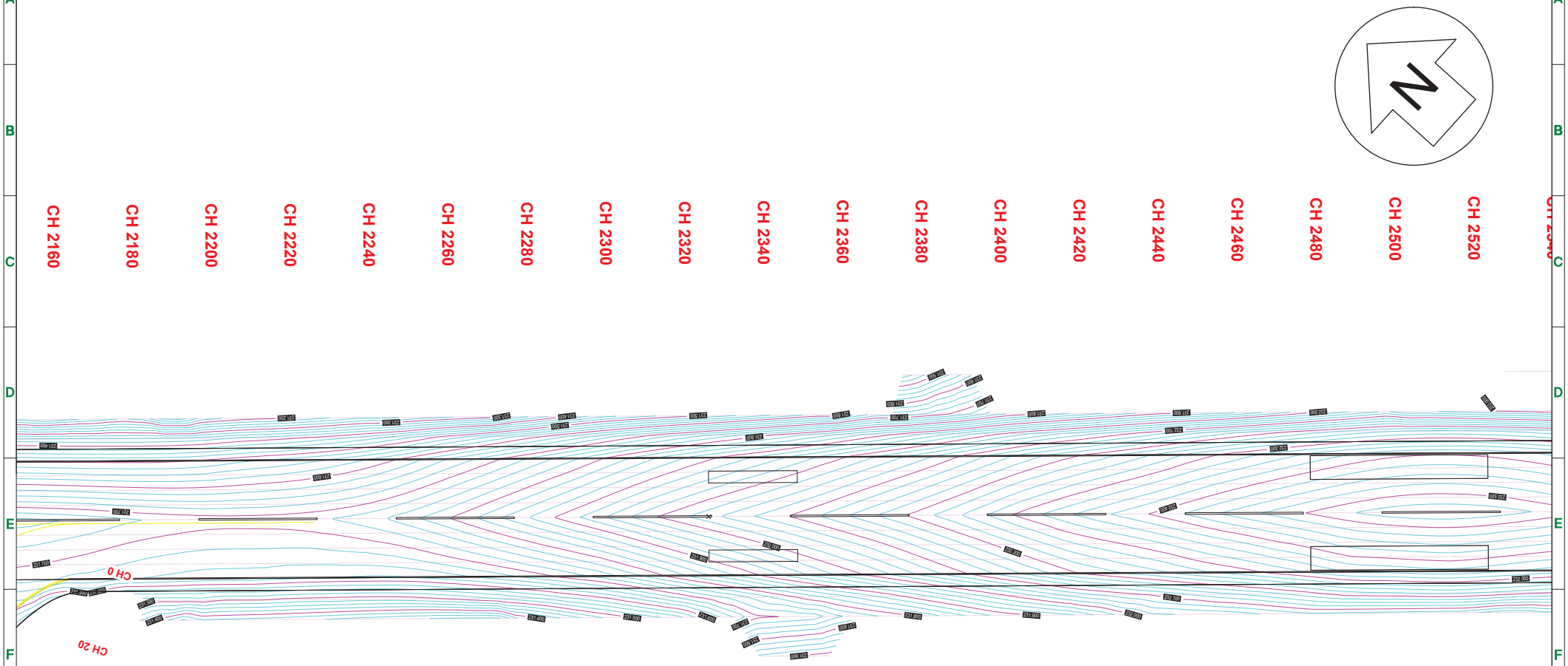
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS

SCALE: 1: 500

DRAWING NAME: PS-CLONC-DES-04

Plot Wed Nov 13 13:17:37 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54

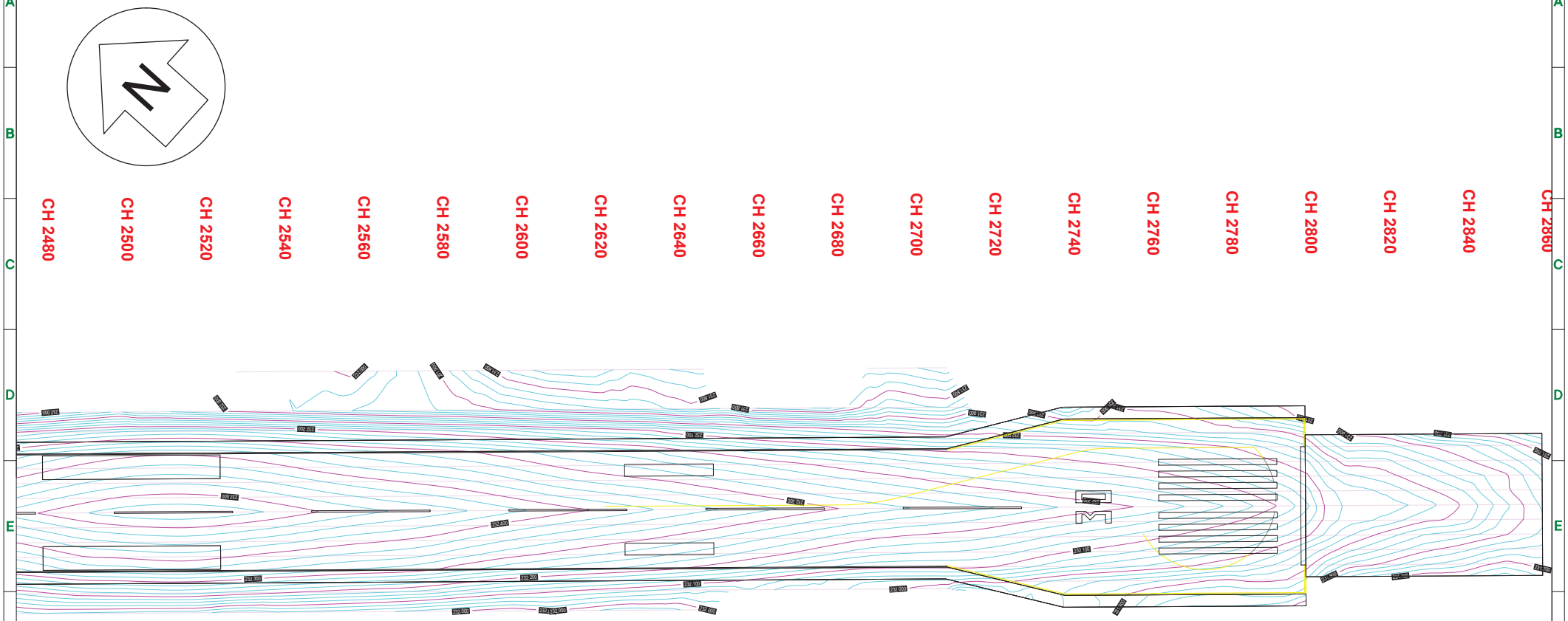
LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS

SCALE: 1: 500

DRAWING NAME: PS-CLONC-DES-05

Plot Wed Nov 13 13:18:01 2024



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EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54

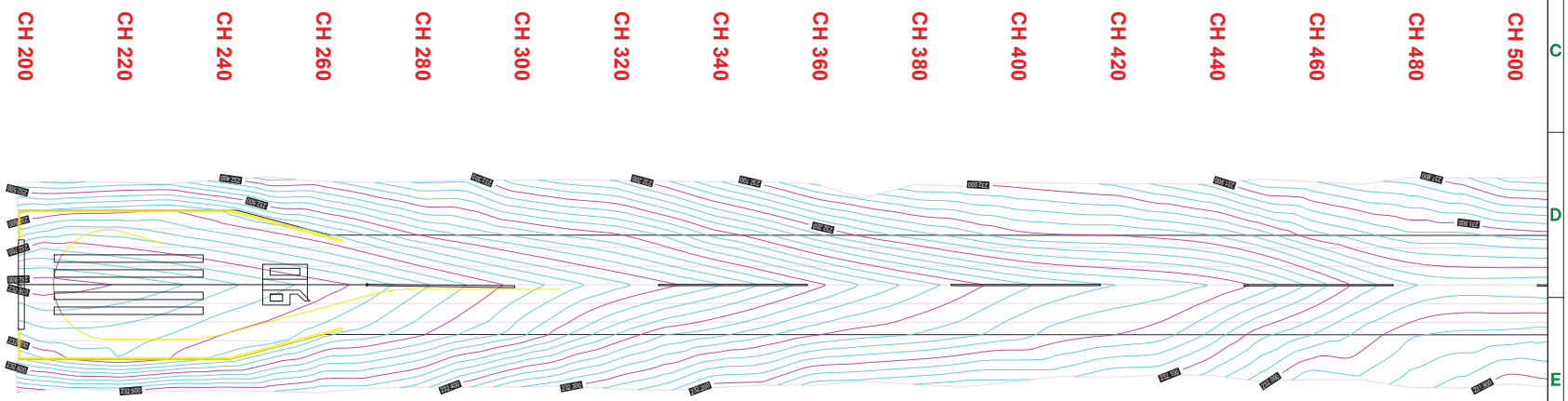
LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DESIGN CONTOURS

SCALE: 1: 500

DRAWING NAME. PS-CLONC-DES-06

Plot Wed Nov 13 13:21:24 2024



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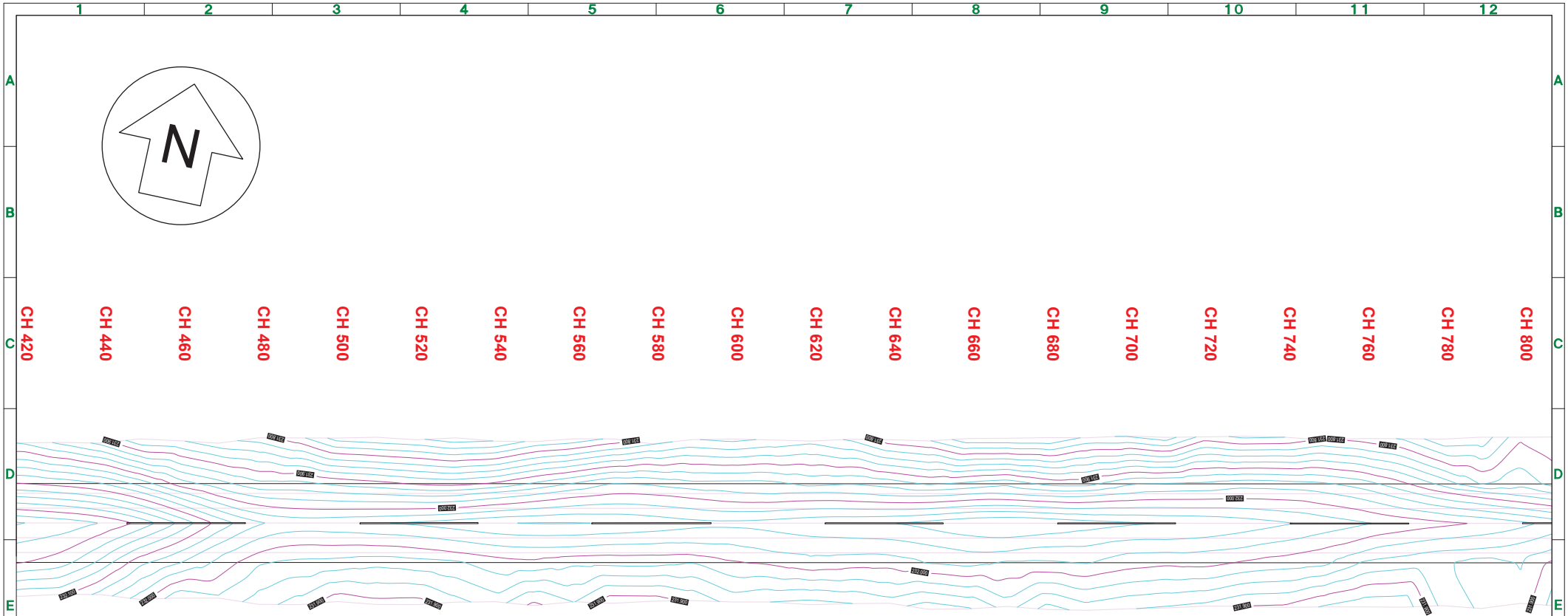
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 DESIGN CONTOURS
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-DES-01

Plot Wed Nov 13 13:11:06 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54

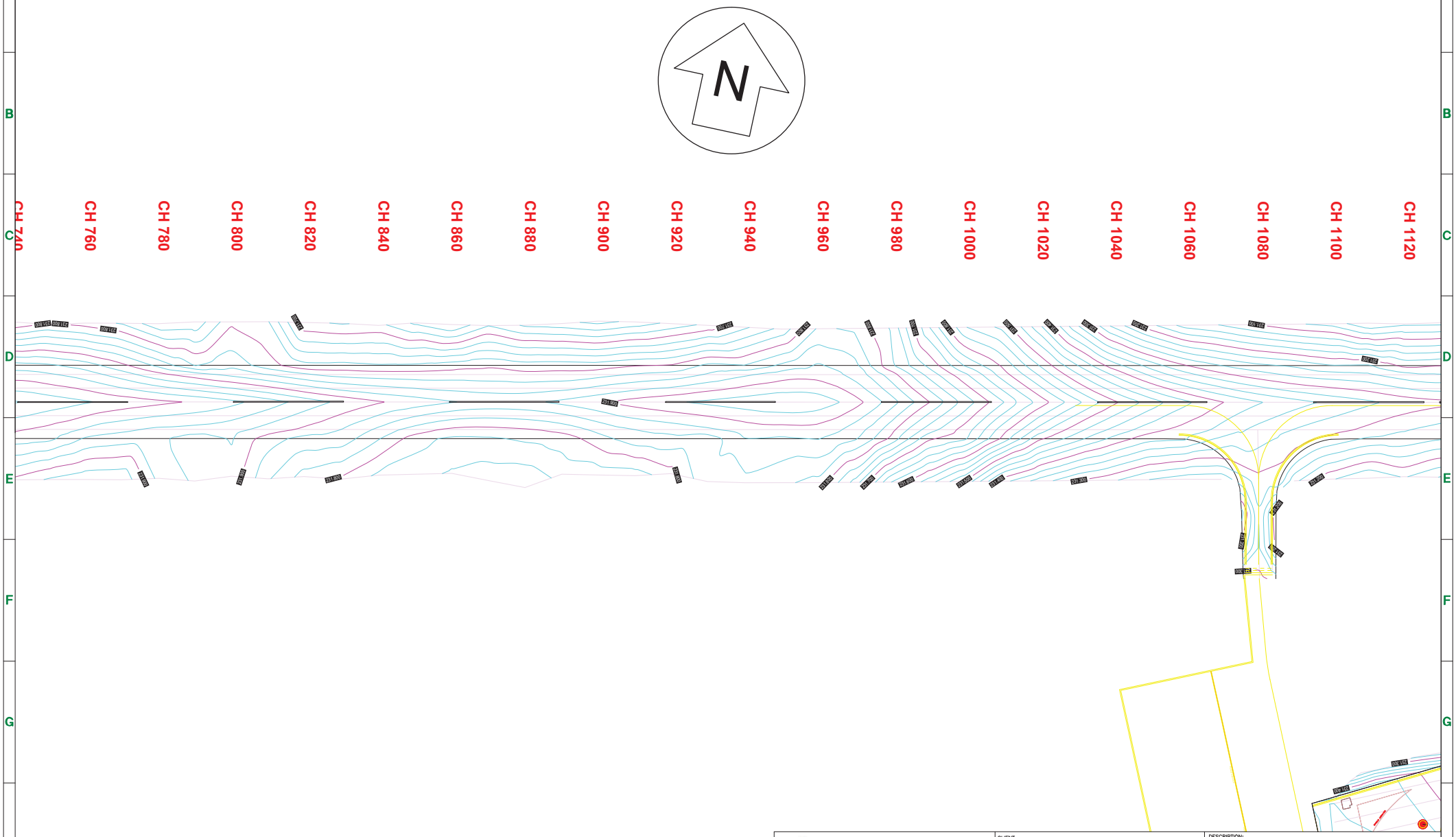
LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 DESIGN CONTOURS

SCALE: 1: 500

DRAWING NAME. PS-CLONC-DES-02

Plot Wed Nov 13 13:12:29 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

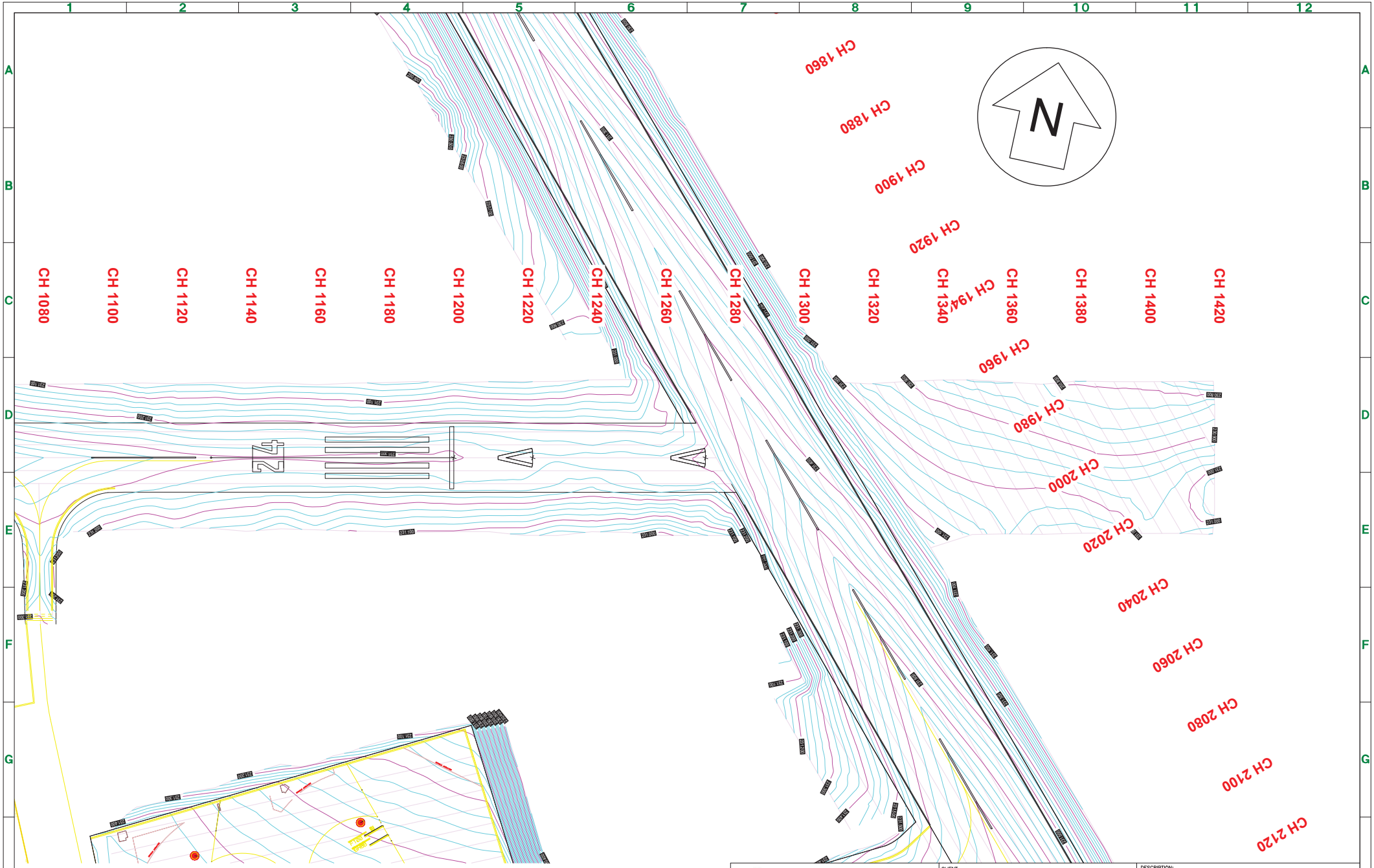
DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 DESIGN CONTOURS

SCALE: 1: 500 | DRAWING NAME: PS-CLONC-DES-03

Plot Wed Nov 13 13:12:53 2024



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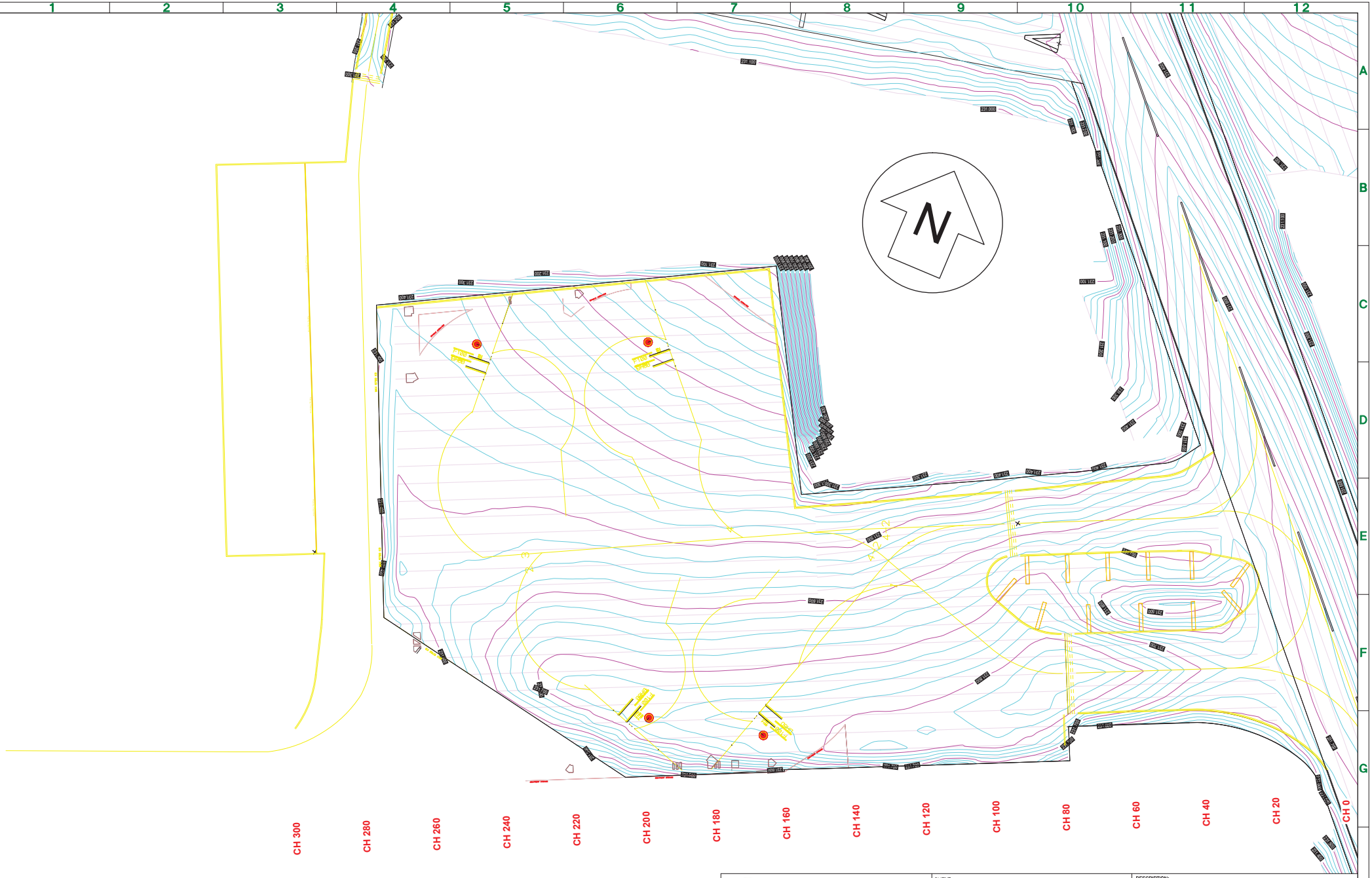
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 0624 DESIGN CONTOURS
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-DES-04

Plot Wed Nov 13 13:13:17 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:
DRAWN: | CHECKED:
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT TAXIWAYS AND APRON DESIGN CONTOURS

SCALE: 1: 500

DRAWING NAME: PS-CLONC-DES-01

Plot Wed Nov 13 13:24:39 2024

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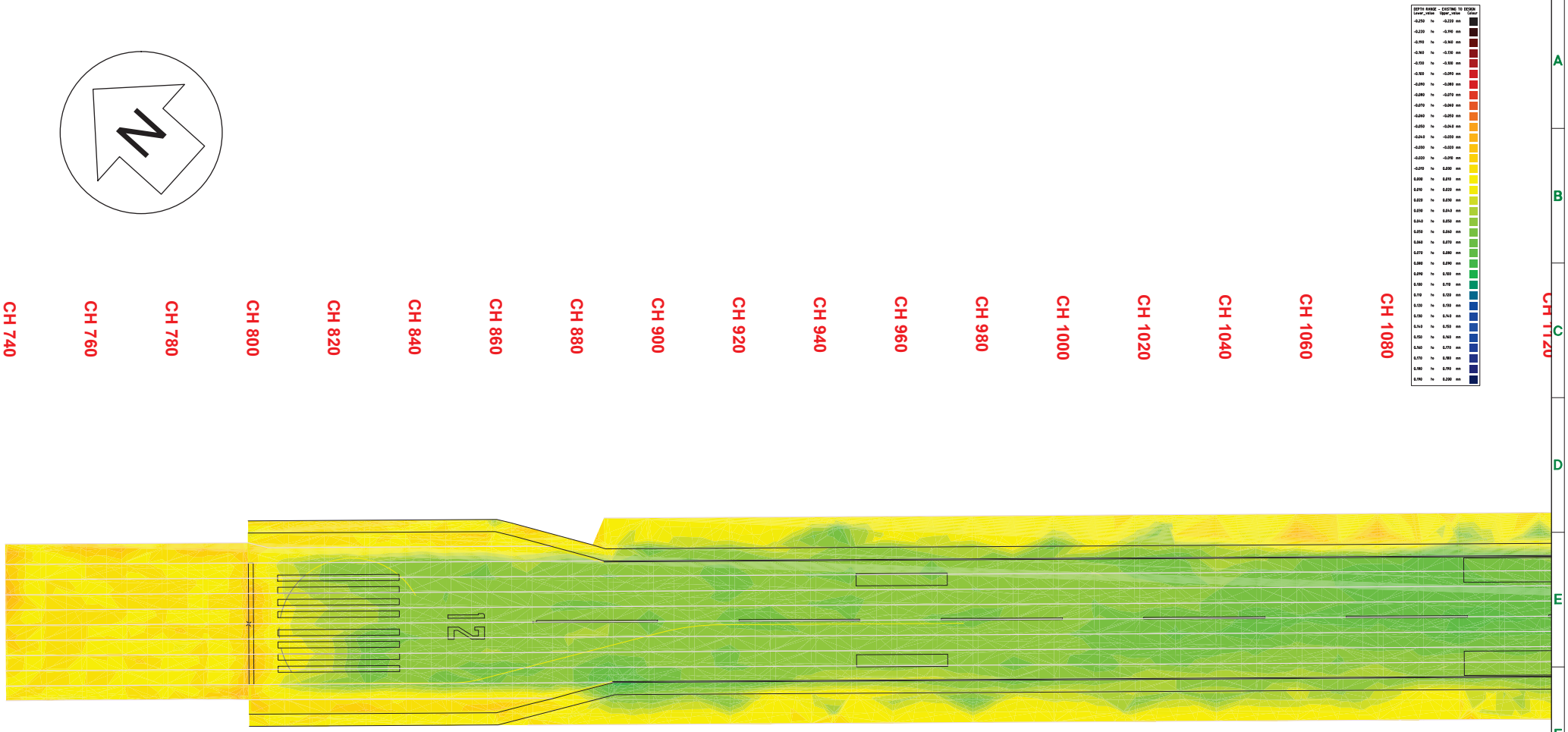
Appendix 8
Existing to design lift plans



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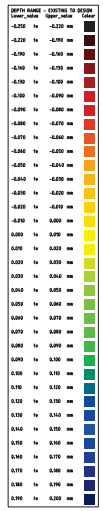
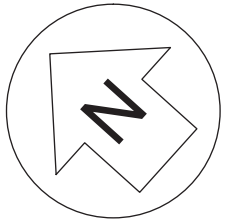
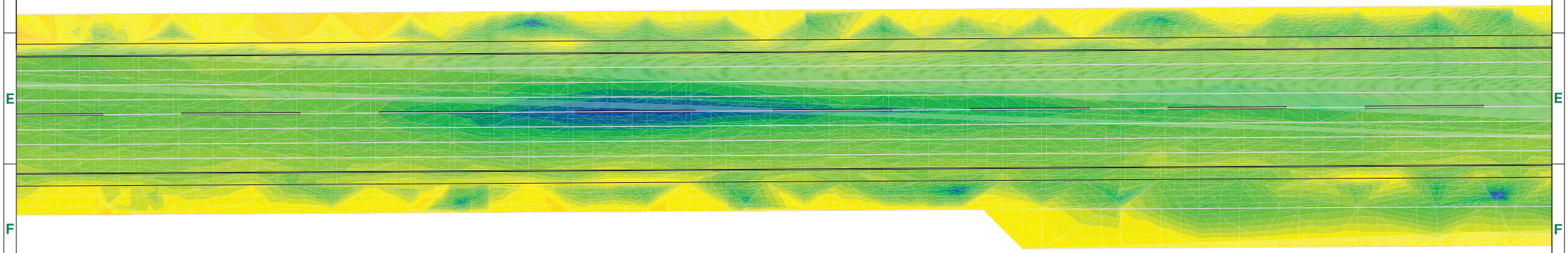
CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DEPTH RANGE ISO PLOT
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-MAP-01

Plot Wed Nov 13 15:23:08 2024





CH 1080 CH 1120 CH 1140 CH 1160 CH 1180 CH 1200 CH 1220 CH 1240 CH 1260 CH 1280 CH 1300 CH 1320 CH 1340 CH 1360 CH 1380 CH 1400 CH 1420 CH 1440 CH 1460



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

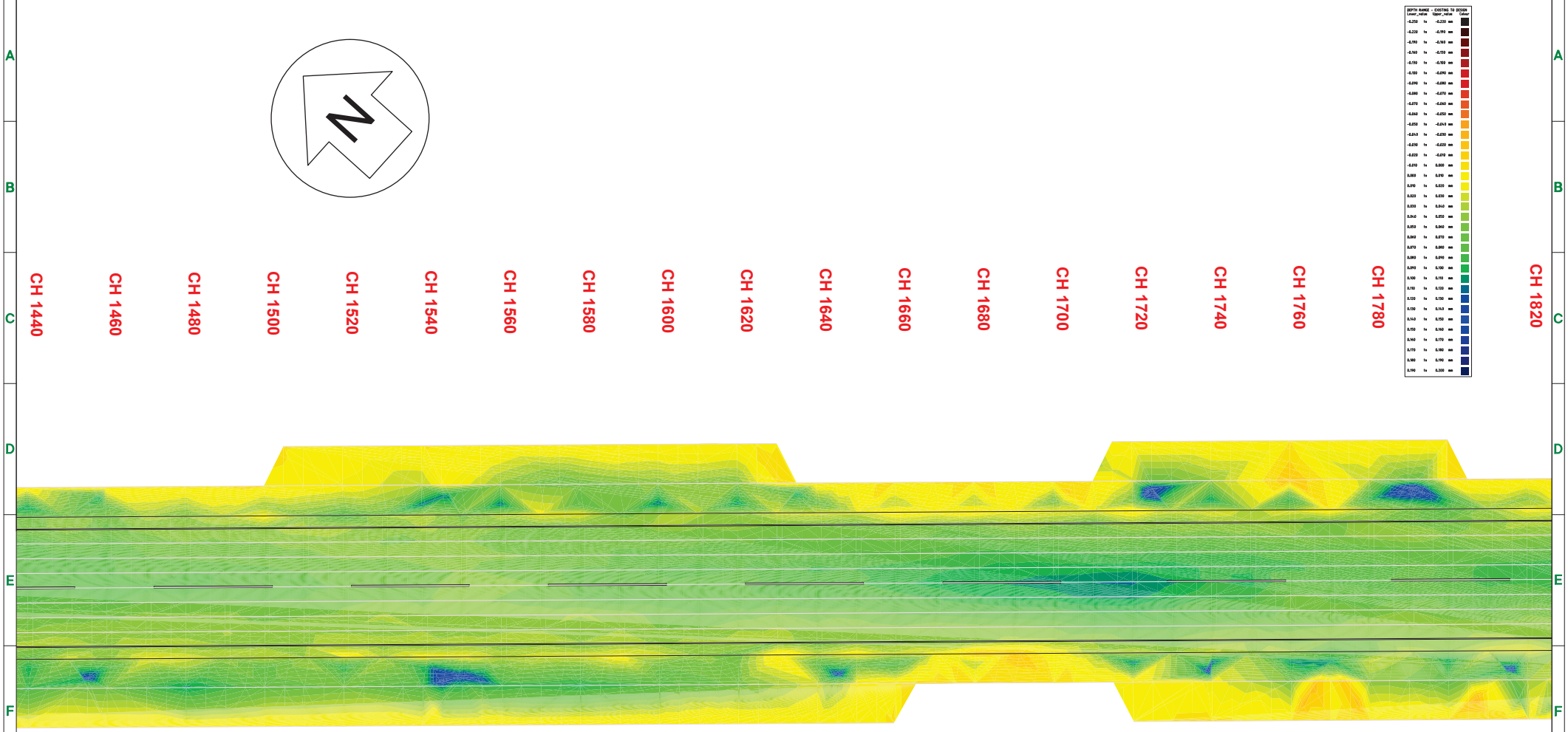
DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DEPTH RANGE ISO PLOT

SCALE: 1: 500 | DRAWING NAME. PS-CLONC-MAP-02

Plot Wed Nov 13 15:26:53 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

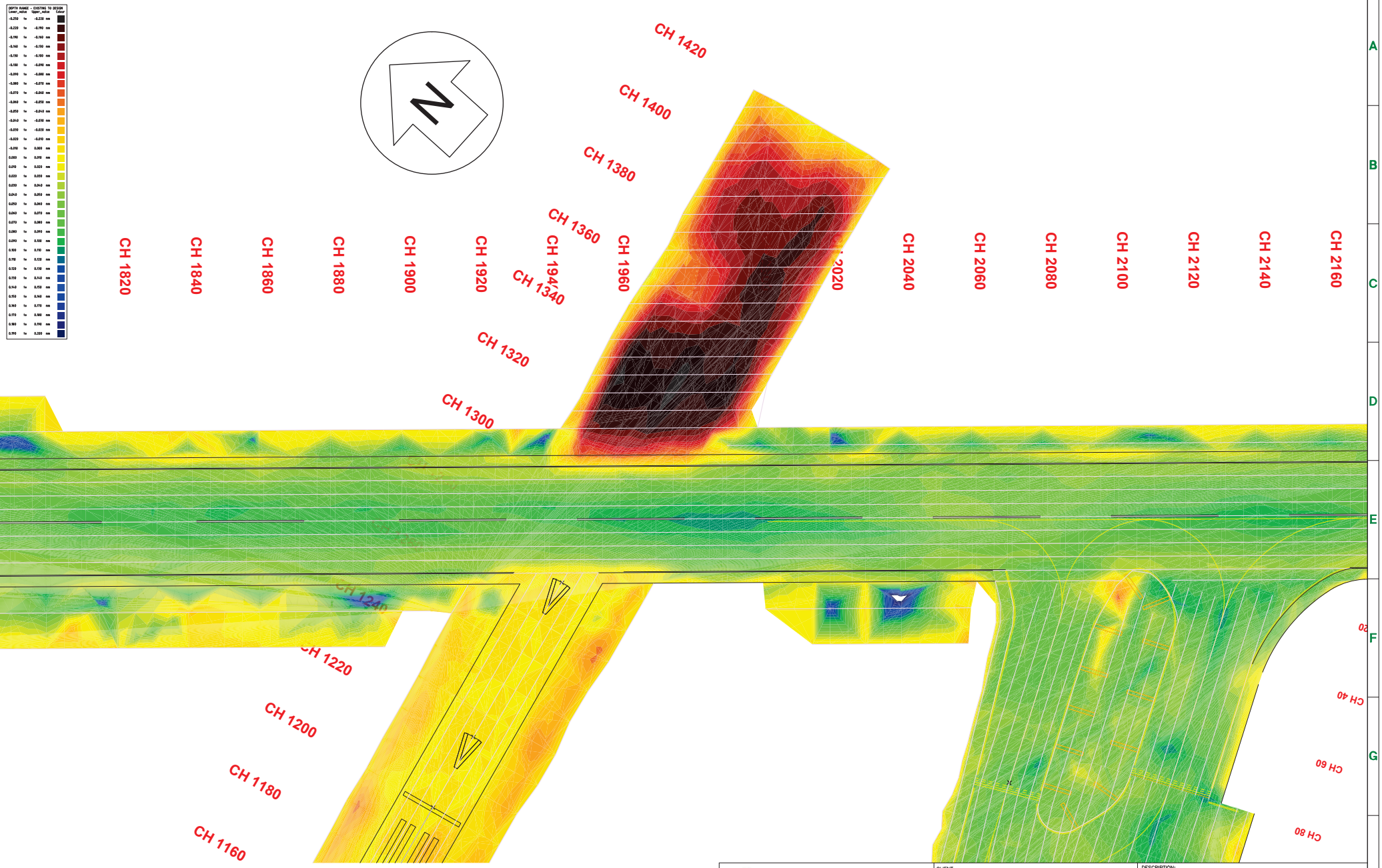
DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DEPTH RANGE ISO PLOT

SCALE: 1: 500 | DRAWING NAME. PS-CLONC-MAP-03

Plot Wed Nov 13 15:27:22 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54

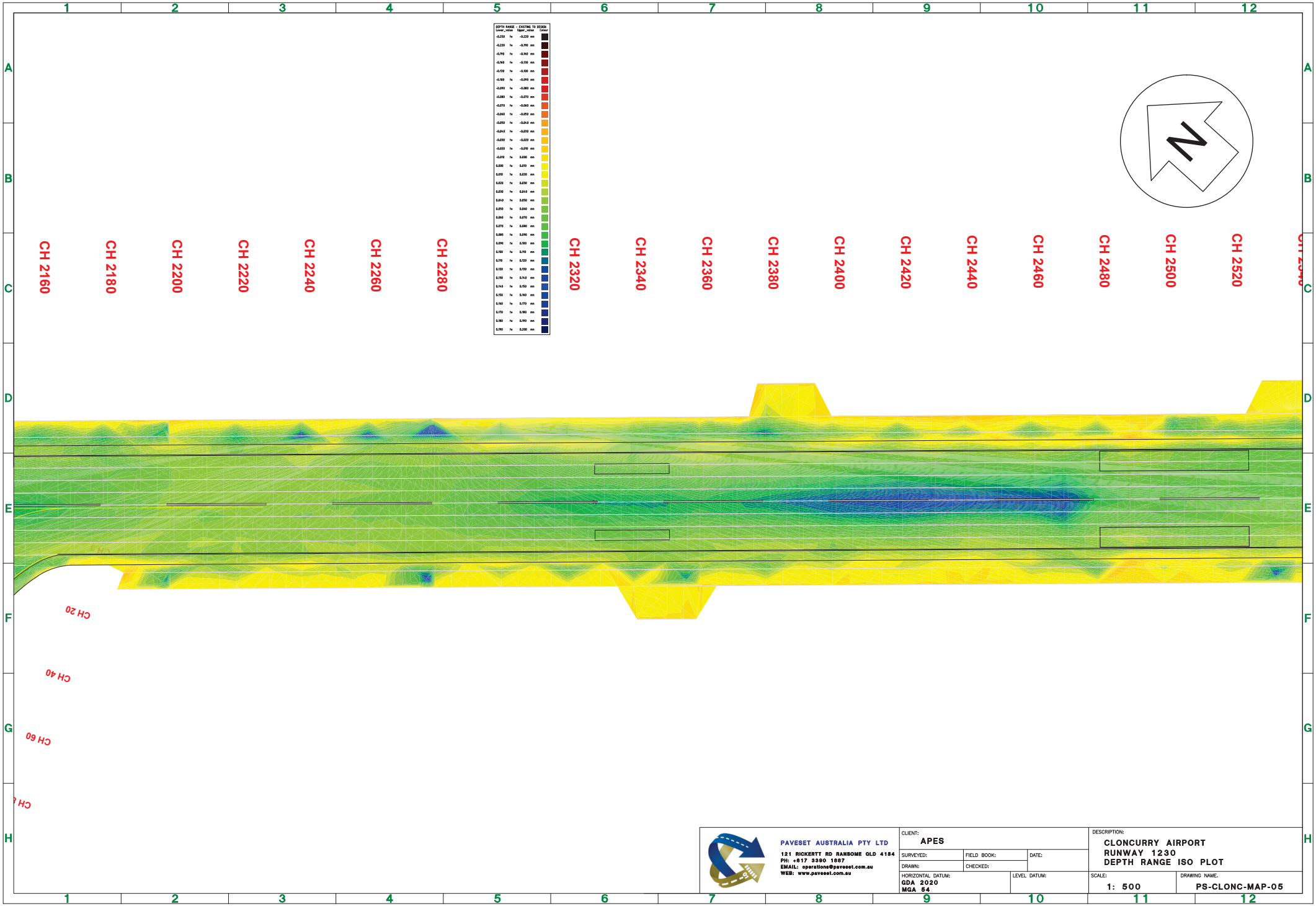
LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT
RUNWAY 1230
DEPTH RANGE ISO PLOT

SCALE: 1: 500

DRAWING NAME. PS-CLONC-MAP-04

Plot Wed Nov 13 15:27:54 2024



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CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

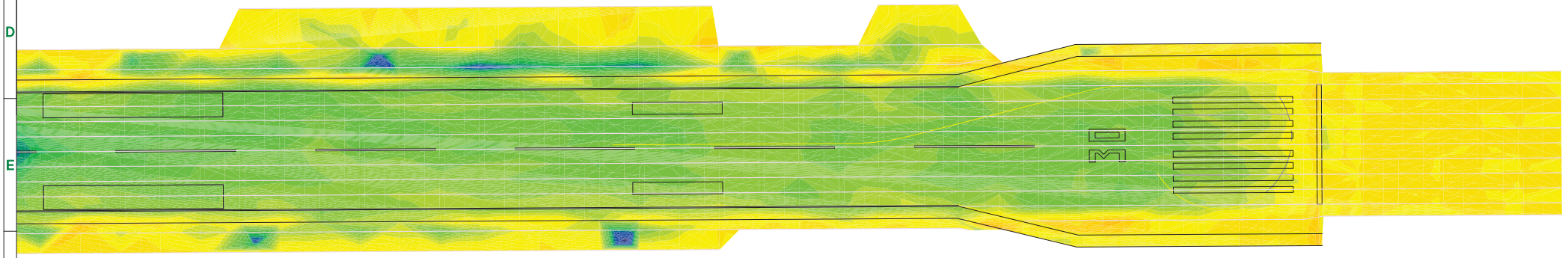
HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DEPTH RANGE ISO PLOT

SCALE: 1: 500

DRAWING NAME: PS-CLONC-MAP-05

Plot Wed Nov 13 15:28:30 2024



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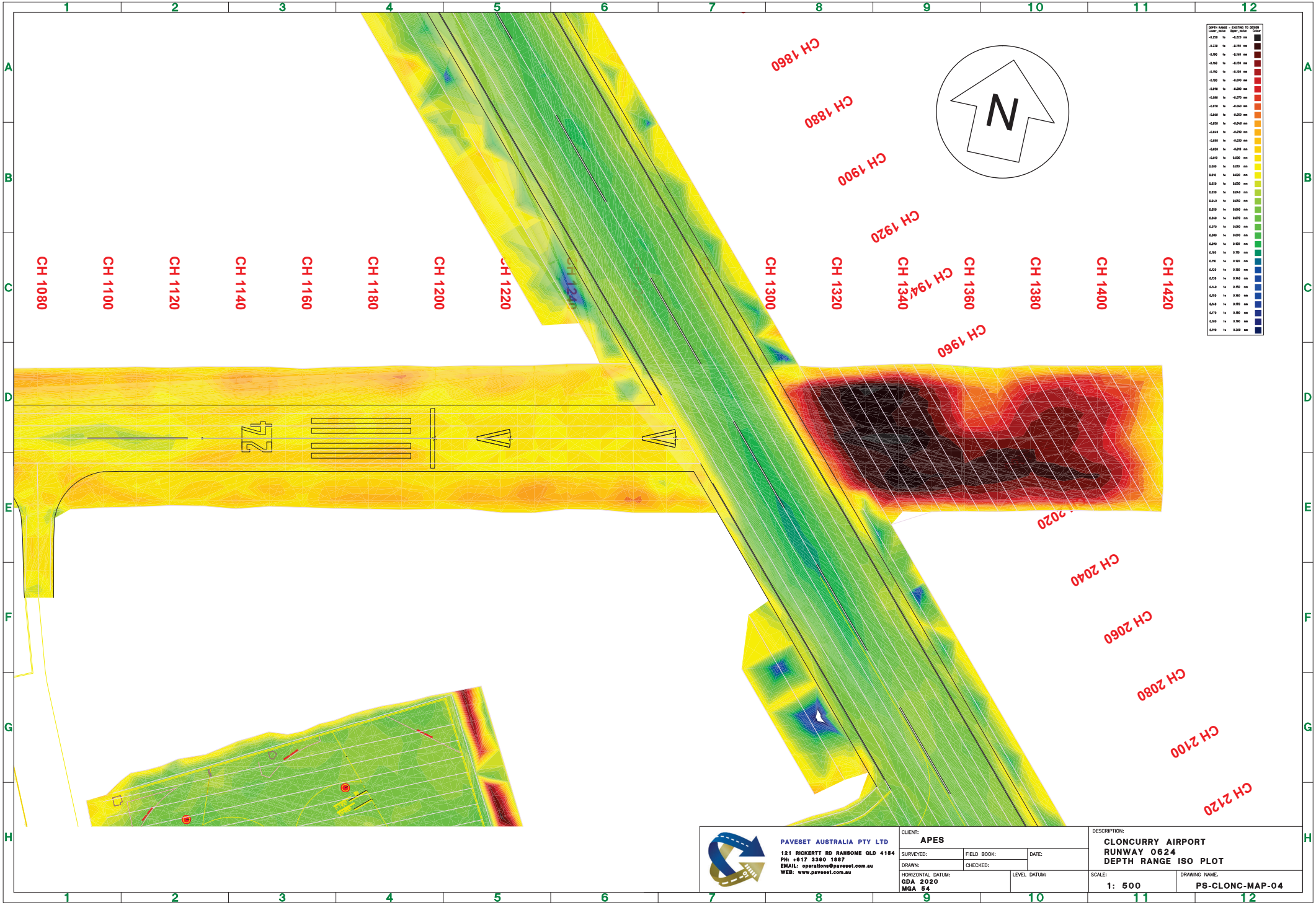
EMAIL: operations@paveset.com.au
WEB: www.paveset.com.au

CLIENT: APES			DESCRIPTION: CLONCURRY AIRPORT RUNWAY 1230 DEPTH RANGE ISO PLOT
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME: PS-CLONC-MAP-06

Plot Wed Nov 13 15:28:54 2024



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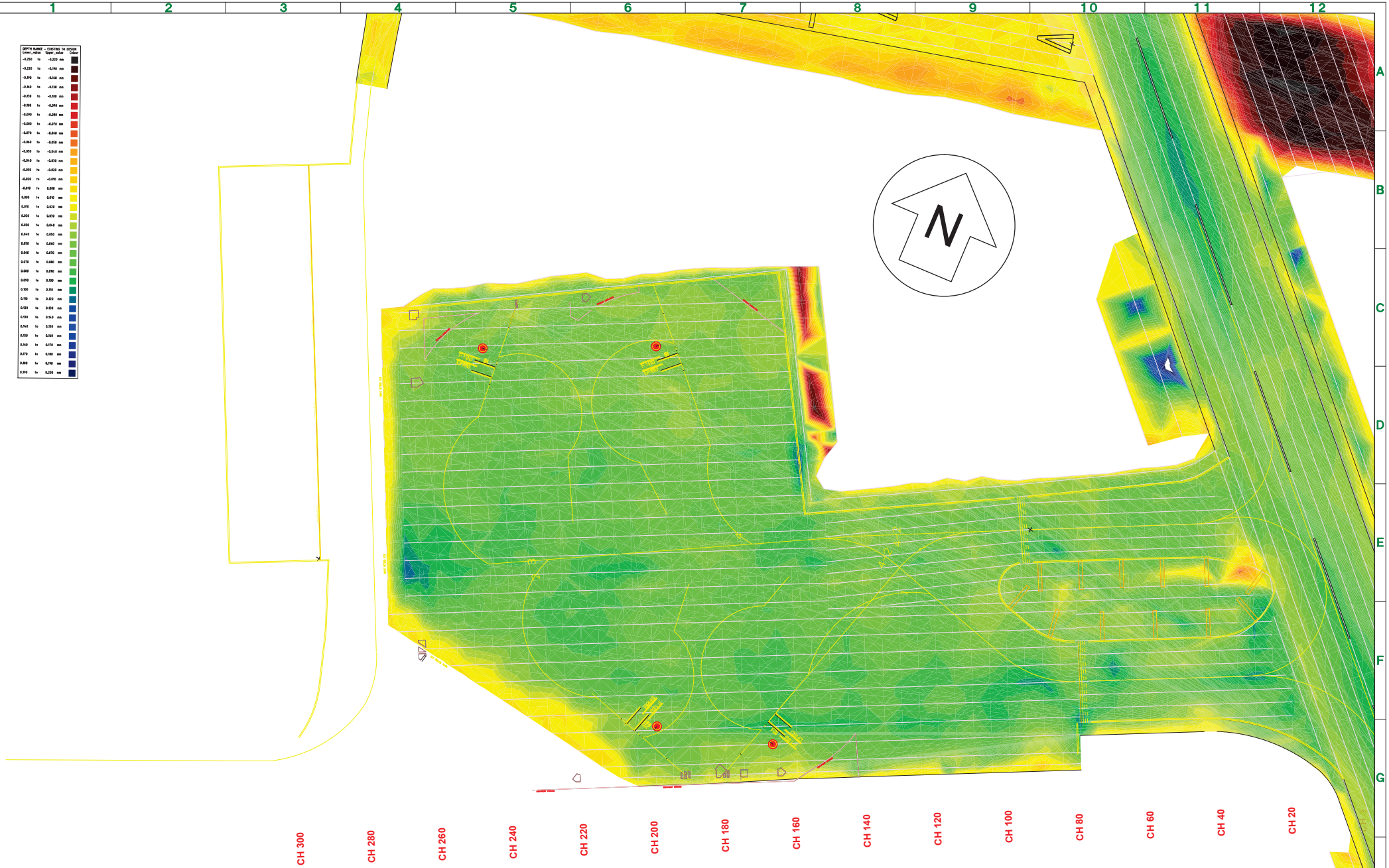
WEB: www.paveset.com.au

CLIENT: APES			
SURVEYED:	FIELD BOOK:	DATE:	
DRAWN:	CHECKED:		
HORIZONTAL DATUM: GDA 2020 MGA 54	LEVEL DATUM:	SCALE: 1: 500	DRAWING NAME. PS-CLONC-MAP-04

DESCRIPTION:
CLONCURRY AIRPORT
RUNWAY 0624
DEPTH RANGE ISO PLOT

Plot Wed Nov 13 15:20:44 2024



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WEB: www.paveset.com.au

CLIENT: APES

SURVEYED: | FIELD BOOK: | DATE:

DRAWN: | CHECKED:

HORIZONTAL DATUM: GDA 2020 MGA 54 | LEVEL DATUM:

DESCRIPTION: CLONCURRY AIRPORT TAXIWAYS AND APRON DEPTH RANGE ISO PLOT

SCALE: 1: 500

DRAWING NAME. PS-CLONC-MAP-01

Plot Wed Nov 13 15:03:43 2024

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Appendix 9
Runway 12/30 lifts, thicknesses and crossfalls

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
800	-7	24	-2	-9	-9	-31	-24	-30	-11	-29	-29	-16	-20	-3	4
805	-3	3	0	10	8	-2	-3	-3	4	-7	-5	9	0	0	0
810	-6	0	1	29	24	23	17	20	17	12	17	27	-1	-2	2
815	-4	0	1	36	35	31	25	29	22	19	22	37	0	-2	2
820	-1	-3	1	41	43	35	30	34	29	26	28	45	-1	-1	1
825	-1	-4	1	40	43	40	34	36	45	42	45	49	-1	-1	2
830	-2	1	1	41	44	43	38	39	58	52	55	49	-1	-5	3
835	-4	1	2	47	43	44	43	45	54	49	49	46	0	-6	3
840	-3	-2	2	49	43	45	46	46	51	44	44	44	0	-1	2
845	1	-2	2	49	46	49	49	47	49	47	48	51	0	-2	4
850	4	-6	2	49	49	49	49	46	48	47	49	55	-1	-1	2
855	11	-8	2	49	51	46	46	45	45	42	52	53	-1	0	2
860	25	4	1	47	51	43	45	45	43	40	53	51	-1	-2	9
865	5	2	1	40	45	42	45	45	44	41	53	50	-2	-8	-1
870	-14	-2	2	37	42	43	47	46	45	41	52	50	-2	-4	3
875	-7	0	4	43	46	44	50	44	42	40	49	48	3	0	0
880		-2	25	47	49	46	52	42	39	41	50	52	19	4	
885		-7	38	45	49	47	52	41	40	45	60	68	51	23	
890			6	39	51	46	50	42	41	47	65	86	51		
895			40	45	49	45	49	49	46	45	60	83	45		
900			49	47	49	45	48	53	48	44	50	66	44		
905			40	48	49	46	48	48	45	46	50	62	43		
910			35	50	49	48	48	44	42	47	47	58	41		
915			39	47	52	50	49	49	44	51	50	61	38		
920			38	47	54	51	49	53	46	51	51	61	33		
925			30	45	48	49	49	54	47	46	50	59	18		
930			25	43	47	48	49	53	47	43	48	57	11		
935			31	42	49	47	48	48	48	45	47	50	15		
940			37	43	51	47	51	44	48	45	46	44	15		
945			41	44	52	47	52	47	45	42	45	44	10		
950			44	44	51	47	52	50	46	41	45	45	8		
955			42	41	48	44	45	48	47	41	46	43	13		
960			40	42	46	42	41	47	48	41	46	44	19		
965			34	45	49	44	42	49	46	40	43	45	24		
970			31	47	52	46	46	52	45	40	42	47	30		
975			35	44	48	48	46	53	45	42	45	49	36		
980			36	43	47	50	48	54	45	43	47	49	39		
985			21	45	48	49	48	50	42	44	50	54	34		
990			15	45	48	49	48	47	42	45	54	58	31		
995			36	43	47	47	43	42	45	43	49	55	28		
1000			48	44	47	46	42	41	49	43	48	52	26		
1005			25	48	43	47	46	46	52	47	53	50	28		
1010			12	50	40	48	50	50	56	51	58	48	31		
1015			27	54	48	45	47	51	55	53	50	44	31		
1020			37	56	53	44	46	53	57	57	46	41	32		
1025			34	55	56	46	46	55	59	58	51	41	37		
1030			33	55	56	49	48	58	61	58	53	41	40		
1035			31	42	47	48	50	55	60	55	47	43	38		
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1045			25	37	49	55	55	62	64	52	44	46	38		
1050			19	41	53	58	57	66	65	52	45	48	40		
1055			10	45	52	57	56	63	59	48	44	47	31		
1060			6	50	53	57	56	62	56	46	43	46	26		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1065			-3	51	57	58	56	65	55	47	48	44	37		
1070			1	50	62	61	58	69	54	49	50	42	44		
1075			2	51	66	66	61	65	55	52	45	42	39		
1080			2	52	69	68	62	63	57	53	42	43	33		
1085			2	62	67	66	64	65	58	53	46	47	22		
1090			6	65	65	65	65	67	61	54	46	48	14		
1095			23	64	65	66	66	72	69	55	44	49	16		
1100			34	61	62	66	66	76	73	56	42	51	20		
1105			21	57	57	63	67	74	67	56	43	46	22		
1110			11	54	52	61	68	73	63	54	44	45	26		
1115			10	50	51	60	65	72	63	54	44	48	32		
1120			9	51	53	60	65	70	62	52	44	49	36		
1125			3	48	50	57	66	71	62	52	45	46	34		
1130			2	47	48	55	66	70	63	53	44	44	31		
1135			9	48	50	56	61	66	62	54	41	42	25		
1140			11	46	51	58	58	63	61	56	40	42	27		
1145			0	48	50	57	62	64	61	54	45	48	43		
1150			-1	48	51	56	64	66	62	54	49	53	51		
1155			1	46	53	58	62	69	68	57	50	51	40		
1160			1	45	56	61	62	71	74	61	52	49	32		
1165			1	47	54	63	68	74	70	62	52	47	28		
1170			3	46	53	64	72	80	70	64	52	46	24		
1175			11	50	52	63	79	89	79	66	50	41	22		
1180			24	55	52	65	85	98	86	68	48	41	22		
1185			32	53	57	69	86	99	90	70	50	48	21		
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1200			47	55	70	78	88	108	101	85	65	40	22		
1205			39	51	69	84	95	112	102	84	64	44	16		
1210			27	50	68	88	100	116	102	83	62	48	13		
1215			19	45	65	88	101	120	105	84	59	44	17		
1220			17	44	66	89	104	123	107	85	57	41	20		
1225			39	56	75	91	107	125	107	84	54	41	12		
1230			55	63	80	92	109	125	107	83	52	38	6		
1235			58	58	80	92	108	125	108	81	50	40	7		
1240			60	54	78	91	107	124	107	80	48	42	10		
1245			59	52	73	90	108	125	105	79	52	40	14		
1250			54	49	68	88	106	125	103	79	56	40	23		
1255			43	51	67	87	104	122	97	77	56	42	48		
1260			38	53	65	84	100	120	93	76	57	46	65		
1265			27	50	66	80	99	118	91	75	56	48	47		
1270			21	43	66	75	96	118	89	74	55	48	33		
1275			35	40	63	74	93	116	89	73	54	45	31		
1280			43	38	57	72	89	113	89	71	54	45	33		
1285			34	39	50	69	84	106	86	68	51	43	43		
1290			25	43	46	66	82	102	84	66	51	42	50		
1295			36	41	50	68	87	104	85	66	54	46	44		
1300			44	39	54	70	89	105	87	67	56	50	42		
1305			37	39	54	70	87	103	90	71	58	51	51		
1310			34	40	57	72	87	102	92	74	59	50	60		
1315			35	43	61	75	87	100	91	74	59	44	64		
1320			34	44	62	74	87	100	89	73	59	41	64		
1325			39	49	61	72	88	102	87	69	61	43	49		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1330			39	52	60	68	88	103	85	67	62	46	41		
1335			29	46	58	66	86	101	85	66	61	51	55		
1340			24	42	57	65	83	97	84	66	59	57	64		
1345			23	55	55	66	77	95	82	70	59	62	72		
1350			18	64	56	68	73	92	80	72	58	65	74		
1355			20	52	60	71	77	90	84	73	57	60	64		
1360			29	47	63	73	81	90	86	73	53	55	56		
1365			43	42	61	71	82	91	84	67	45	46	58		
1370			50	41	59	71	84	91	82	64	40	41	62		
1375			38	46	57	70	87	86	80	64	49	46	64		
1380			29	53	57	71	87	83	78	66	55	48	64		
1385			34	50	58	75	88	85	76	63	51	44	67		
1390			36	46	57	75	87	87	75	62	48	41	67		
1395			41	45	54	71	85	87	76	64	50	44	59		
1400			52	44	53	69	84	88	78	65	52	46	49		
1405			64	42	53	69	82	91	80	68	55	48	36		
1410			75	42	55	69	81	92	80	71	57	49	24		
1415			63	45	57	68	79	87	77	68	59	47	15		
1420			54	46	60	68	79	83	73	64	58	44	8		
1425			61	49	67	74	77	82	69	57	51	41	11		
1430			66	51	70	75	76	82	66	52	46	41	18		
1435			67	56	74	78	78	81	70	55	48	43	46		
1440			67	57	74	78	79	80	71	57	48	47	64		
1445			61	48	67	74	78	78	66	55	44	51	44		
1450			55	45	61	71	75	75	64	54	43	52	36		
1455			56	56	64	70	72	77	68	52	43	52	45		
1460			53	59	67	70	71	79	69	51	44	49	45		
1465			44	49	60	64	67	76	64	48	46	45	31		
1470			39	47	55	60	66	76	59	45	46	41	20		
1475			43	47	52	59	68	78	61	47	46	42	22		
1480			47	46	51	57	70	78	61	47	45	44	27		
1485			41	44	52	56	69	72	59	47	42	43	36		
1490			30	43	52	55	68	67	58	47	40	43	43		
1495			19	43	51	56	66	66	60	52	42	42	37		
1500			17	42	50	55	63	66	60	54	43	42	34		
1505			35	38	48	55	61	65	59	52	42	42	41		
1510			53	37	46	54	60	63	59	50	42	40	42		
1515			65	37	44	50	58	61	55	49	42	41	33		
1520			72	39	43	48	57	60	51	47	42	43	21		
1525			61	40	47	48	58	61	50	42	43	45	32		
1530			50	45	51	49	58	61	50	39	43	46	33		
1535			41	45	51	47	56	58	51	44	41	47	23		
1540			38	41	49	45	53	55	51	47	41	47	14		
1545			45	45	49	46	51	48	48	47	44	46	15		
1550			50	48	49	48	50	43	47	46	46	45	17		
1555			40	46	52	49	51	45	49	44	44	48	27		
1560			33	50	56	49	54	48	51	43	42	49	33		
1565			25	51	59	50	56	50	54	43	42	46	30		
1570			19	50	60	52	58	53	56	43	42	44	26		
1575			21	51	59	52	60	60	59	40	47	49	26		
1580			23	50	57	53	62	65	62	39	49	51	22		
1585			39	46	57	58	63	66	66	43	44	45	14		
1590			54	46	57	62	65	66	68	46	42	41	23		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1595			47	44	58	62	70	67	67	50	47	42	26		
1600			40	41	57	62	72	68	67	55	50	43	32		
1605			36	45	57	63	73	68	68	58	49	40	42		
1610			40	50	58	64	74	67	69	60	49	41	48		
1615			45	51	58	67	73	68	67	58	45	42	53		
1620			44	51	59	67	70	68	65	56	41	44	50		
1625			35	51	61	64	72	73	68	52	41	49	22		
1630			26	50	61	63	74	75	68	50	40	50	5		
1635			29	49	60	65	79	75	70	53	44	54	20		
1640			28	49	59	68	82	74	72	55	46	56	29		
1645			26	52	61	71	80	76	70	55	43	49	19		
1650			21	51	62	73	80	80	70	55	43	45	15		
1655			13	40	58	71	82	85	72	59	47	46	25		
1660			8	40	58	73	84	90	75	62	47	45	29		
1665			7	43	60	75	86	92	79	63	45	46	23		
1670			7	48	63	77	88	94	83	64	43	47	13		
1675			5	50	65	80	90	96	86	66	45	44	-3		
1680			6	48	67	83	90	99	89	69	46	41	-15		
1685			12	43	64	84	93	100	92	70	46	37	-15		
1690			15	40	60	84	93	102	94	72	47	35	-14		
1695			17	44	60	82	94	105	94	73	50	37	0		
1700			18	48	59	81	94	108	96	74	53	39	13		
1705			20	56	56	79	94	108	100	79	59	41	27		
1710			18	56	53	78	94	110	102	82	64	42	38		
1715			8	47	54	77	94	111	104	82	63	47	34		
1720			4	41	56	78	96	110	103	82	63	51	33		
1725			18	49	58	81	96	106	97	78	63	56	38		
1730			27	50	56	80	94	100	91	76	62	58	40		
1735			25	44	59	79	91	94	86	73	59	52	33		
1740			24	40	60	79	87	89	82	70	57	47	31		
1745			28	41	55	79	88	92	83	70	54	45	37		
1750			32	42	52	77	88	91	81	67	52	43	42		
1755			35	45	51	74	86	79	68	61	51	49	41		
1760			34	46	50	70	83	71	59	57	52	54	45		
1765			12	50	51	68	77	72	60	58	52	51	59		
1770			6	53	52	66	72	73	61	59	51	50	67		
1775			21	50	48	65	71	75	63	58	46	52	61		
1780			38	48	45	66	72	76	64	59	42	53	53		
1785			45	53	43	65	70	70	65	53	42	49	43		
1790			56	56	41	64	70	67	66	52	42	48	38		
1795			67	59	46	64	70	73	64	55	44	45	42		
1800			72	60	50	65	74	77	66	59	46	44	43		
1805			55	52	46	62	79	82	71	61	46	45	31		
1810			38	45	44	61	83	85	75	62	47	45	23		
1815			28	40	45	61	84	85	72	56	46	41	19		
1820			21	37	47	62	85	85	71	54	45	41	19		
1825			18	40	48	64	88	88	75	58	47	50	31		
1830			12	43	50	66	89	90	80	62	49	55	38		
1835			3	45	53	69	83	88	83	66	51	48	31		
1840			-3	47	55	73	82	87	84	69	50	43	26		
1845			4	45	52	73	91	90	84	64	51	45	31		
1850			9	43	48	72	96	90	83	61	51	49	36		
1855			13	40	46	70	92	86	84	66	49	42	32		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1860			18	36	46	69	87	83	84	68	47	39	29		
1865			25	40	52	73	83	86	82	65	49	43	27		
1870			34	43	55	75	80	87	81	64	51	45	26		
1875			48	43	54	70	81	88	81	63	54	42	35		
1880			58	45	53	69	83	87	81	63	56	41	40		
1885			56	53	58	70	88	86	82	64	54	45	33		
1890			54	57	60	71	91	85	83	65	52	49	32		
1895			55	47	57	70	85	81	87	63	45	48	39		
1900			52	38	51	68	81	78	89	61	40	48	41		
1905			45	38	47	65	82	79	90	57	39	54	31		
1910			37	38	44	62	81	78	89	55	40	60	17		
1915			34	38	44	62	77	76	82	55	40	60	-2		
1920			34	39	44	64	75	75	77	53	41	50	-12		
1925			24	37	41	65	81	75	74	52	41	22	0		
1930			31	35	40	66	85	77	70	52	40	-4	-5		
1935			41	36	42	65	88	81	69	53	43	-1	0		
1940			27	26	43	63	91	85	69	55	43	-3	0		
1945			-30	9	43	63	88	86	72	58	42	-3	0		
1950			-60	3	44	63	86	89	76	62	43	1	0		
1955			-61	1	43	66	87	96	80	66	50	-1	-10		
1960			-69	-1	46	68	87	101	82	67	52	1	-3		
1965			-63	0	53	70	87	98	89	69	54	1	-11		
1970			-56	-1	46	73	88	98	95	73	59	4	1		
1975			-55	4	44	74	92	103	95	81	70	29	-3		
1980			-46	17	43	73	94	106	95	82	72	45	2		
1985			-12	36	48	75	91	106	98	83	72	48	15		
1990			-5	37	51	75	89	106	99	84	72	46	23		
1995			7	38	51	74	92	103	98	86	74	51	7		
2000			26	44	53	73	96	102	96	85	73	51	0		
2005			42	45	50	74	93	100	94	79	63	42	17		
2010			57	43	46	73	87	99	92	74	57	36	25		
2015			37	37	41	65	82	98	93	72	54	36	19		
2020			25	36	40	62	79	95	91	71	53	38	19		
2025			17	35	47	64	78	87	90	73	61	45	18		
2030			14	37	52	63	73	78	87	73	65	52	20		
2035			36	43	51	59	64	71	84	71	61	54	24		
2040			51	48	52	56	56	64	79	68	57	57	30		
2045			35	51	49	51	49	54	70	60	50	60	41		
2050			29	54	49	50	44	45	61	53	45	57	40		
2055			39	49	50	53	45	44	55	55	46	48	0		
2060			44	46	52	57	46	45	51	56	47	39	-11		
2065			39	49	60	58	51	51	52	54	49	48	34		
2070			31	51	62	57	55	56	52	52	49	55	44		
2075			20	51	58	56	56	56	54	53	49	69	56		
2080			13	48	53	55	56	58	56	54	52	72	61		
2085			15	43	47	53	57	65	61	63	57	77	48		
2090			12	39	43	52	58	71	66	67	64	75	40		
2095			5	40	50	56	62	75	70	66	54	50	7		
2100			-1	40	52	60	66	80	74	62	41	31	-21		
2105			7	42	51	64	72	86	77	64	43	32	11		
2110			15	43	49	65	74	90	79	66	43	41	93		
2115			28	43	51	70	74	91	81	65	45	48	89		
2120			35	42	52	72	75	92	81	64	44	47	83		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2125			24	42	52	73	79	94	80	65	47	44	82		
2130			18	42	54	74	83	96	80	67	50	42	81		
2135			21	44	55	74	85	97	85	71	52	43	74		
2140			28	46	58	74	87	98	87	75	54	42	70		
2145			38	47	60	70	82	98	88	74	56	46	75		
2150			45	48	61	69	79	97	88	73	55	49	84		
2155			43	46	61	73	79	97	89	73	52	45	78		
2160			43	44	60	76	79	93	86	70	48	45	76		
2165			47	48	60	72	77	86	80	64	43	42	66		
2170			53	55	60	68	74	79	74	60	39	44	0		
2175			58	60	60	64	71	71	69	56	40	41	3		
2180			62	62	59	60	66	64	63	53	40	39	1		
2185			49	52	60	58	60	65	57	49	36	46	-2		
2190			34	46	59	56	55	63	52	47	36	52	0		
2195			25	43	54	53	50	51	45	43	43	52	7		
2200			20	41	49	50	47	42	42	43	46	52	15		
2205			30	39	49	47	45	45	47	45	39	53	31		
2210			42	40	48	45	45	48	52	47	36	54	42		
2215			59	47	44	42	44	46	51	44	40	51	40		
2220			68	53	43	41	45	46	49	42	39	46	31		
2225			54	52	45	45	46	44	48	44	40	48	28		
2230			44	48	46	48	46	43	49	47	40	50	22		
2235			41	43	41	44	43	44	50	47	41	50	17		
2240			34	39	40	43	42	45	51	46	39	48	13		
2245			22	43	45	46	44	49	48	45	42	43	22		
2250			20	46	49	50	47	52	49	45	43	40	26		
2255			39	47	52	51	48	53	52	46	41	40	22		
2260			52	48	53	52	49	54	54	47	41	43	21		
2265			44	49	52	51	50	55	53	48	40	48	22		
2270			38	50	50	52	52	57	54	49	41	51	24		
2275			34	52	50	53	54	58	54	48	43	47	24		
2280			32	53	50	55	56	61	57	51	46	44	26		
2285			28	45	51	58	61	65	66	58	45	42	21		
2290			23	40	53	61	65	70	73	61	45	45	18		
2295			14	43	56	63	65	74	73	60	46	46	16		
2300			7	47	60	66	67	79	75	61	47	46	14		
2305			13	53	62	69	76	87	81	67	48	50	21		
2310			16	54	64	71	82	93	86	71	49	49	25		
2315			16	45	63	71	83	95	87	70	51	42	24		
2320			15	39	61	70	83	96	88	70	53	42	22		
2325			17	39	60	72	85	100	91	74	57	40	24		
2330			22	40	58	72	85	102	92	76	58	38	26		
2335			38	46	56	71	84	103	92	74	57	42	34		
2340			49	49	54	70	82	102	94	73	57	48	42		
2345			51	47	53	70	84	101	97	72	55	52	43		
2350			49	44	52	69	85	100	96	70	51	53	42		
2355			36	40	48	64	80	96	91	63	47	49	38		
2360			28	36	44	62	79	94	88	59	43	46	37		
2365			27	38	47	65	84	96	91	62	44	41	39		
2370			29	41	49	68	88	99	93	66	46	38	42		
2375			42	42	48	70	89	104	93	67	45	38	45		
2380			50	43	48	72	90	109	94	69	46	37	45		
2385			40	41	52	76	93	113	97	70	50	37	37		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2390			31	39	55	79	96	117	100	71	52	38	29		
2395			22	38	57	82	100	120	106	75	50	47	34		
2400			16	39	59	84	103	122	111	79	50	51	34		
2405			13	48	63	88	105	125	112	82	52	45	24		
2410			13	53	65	89	106	127	112	84	53	38	16		
2415			21	50	65	90	109	129	115	85	56	37	19		
2420			23	46	64	91	111	131	115	85	57	38	22		
2425			13	42	61	88	109	133	113	81	55	41	22		
2430			7	40	60	87	108	134	109	77	51	41	19		
2435			10	44	62	86	105	134	106	70	45	40	14		
2440			11	48	63	86	103	133	105	66	40	37	13		
2445			0	46	62	85	105	130	104	66	42	37	20		
2450			-5	44	62	85	105	128	105	69	46	39	25		
2455			7	40	59	84	102	128	107	70	49	41	20		
2460			13	36	57	83	100	128	109	72	52	42	21		
2465			2	37	63	88	104	128	115	85	57	42	38		
2470			-6	42	66	89	103	124	113	92	60	44	49		
2475			-12	54	59	78	92	107	91	74	49	46	36		
2480			-16	60	52	67	81	92	73	62	41	48	21		
2485			-18	45	48	60	73	85	68	60	38	46	1		
2490			-24	37	46	57	69	80	66	58	38	45	-12		
2495			-9	43	48	61	72	77	71	60	41	43	-7		
2500			4	50	50	64	74	74	74	60	45	41	-4		
2505			12	58	55	66	74	71	70	58	49	45	-4		
2510			14	62	59	66	72	67	66	57	53	48	1		
2515			3	62	61	66	71	67	63	58	56	42	13		
2520			-1	61	62	65	70	65	59	57	53	37	20		
2525			16	63	65	65	73	64	55	56	49	40	19		
2530			25	66	66	65	75	63	53	54	45	43	17		
2535			21	71	63	66	74	61	58	53	43	42	9		
2540			15	72	62	65	70	58	59	52	43	42	8		
2545			7	66	64	59	59	48	52	54	42	49	27		
2550			-1	61	64	55	53	43	47	52	41	53	43		
2555			-8	56	59	60	63	55	47	47	42	51	38		
2560			-10	54	55	64	71	63	48	44	41	50	34		
2565			-1	58	49	62	67	58	47	46	40	45	33		
2570			10	61	44	62	65	55	47	47	39	42	31		
2575			19	62	41	59	64	57	51	47	39	42	26		
2580			29	63	40	58	62	59	53	47	38	40	14		
2585			37	65	45	59	58	64	50	45	40	43	12		
2590			43	64	47	59	54	66	48	46	43	47	1		
2595			35	58	47	59	54	61	46	49	42	47	1		
2600			25	54	48	58	52	59	46	53	42	46	1		
2605			12	51	48	60	54	59	49	54	41	46	4		
2610			8	47	47	60	57	59	52	56	40	45	5		
2615			32	47	41	59	64	55	57	58	41	43	24		
2620			47	47	38	59	68	54	59	58	41	42	27		
2625			36	48	40	61	68	55	55	54	43	45	22		
2630			24	49	42	61	67	56	52	52	45	48	9		
2635			7	52	42	58	65	61	51	54	47	45	10		
2640			-9	45	41	54	60	63	49	54	46	43	12		
2645			0	43	39	47	50	54	44	50	44	41	10		
2650			12	46	41	42	43	48	41	48	42	40	7		

LIFT FROM EXISTING TO DESIGN

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2655			23	47	40	43	43	48	40	48	42	41	4		
2660			28	47	40	44	42	49	41	48	45	41	3		
2665			14	48	40	45	44	49	45	49	52	44	4		
2670			8	50	41	46	47	51	49	50	55	47	5		
2675			18	51	47	48	56	57	52	49	48	49	15		
2680			18	52	49	48	61	60	52	49	42	52	24		
2685			-2	44	44	44	58	56	49	48	38	50	11		
2690			-18	41	41	41	56	52	46	49	37	53	4		
2695			2	47	48	43	58	48	44	50	41	47	5		
2700			16	51	55	44	60	48	45	52	46	45	11		
2705			25	53	60	49	63	51	52	53	48	46	21		
2710			26	50	63	53	66	52	57	56	49	40	20		
2715		-3	24	43	48	49	64	48	57	56	47	37	26	-24	
2720		-10	-2	37	38	47	62	46	56	57	45	35	6	-29	
2725	-6	-13	-11	40	39	49	60	47	56	59	51	50	-4	-1	
2730	-1	-8	-6	47	39	50	58	50	55	58	52	57	-11	-9	12
2735	17	-7	1	56	40	55	60	52	53	52	49	55	-10	-11	14
2740	2	31	4	61	40	59	60	56	51	50	49	54	-11	6	1
2745	4	-4	-3	56	41	58	52	60	51	55	56	54	-18	-4	1
2750	-2	-4	-9	52	41	56	47	62	52	60	62	53	-19	-4	4
2755	-2	-4	-9	53	44	60	53	60	50	62	58	49	-4	-3	3
2760	-1	-4	-9	56	45	60	55	56	46	61	52	46	8	-3	3
2765	-1	-4	-8	59	42	49	49	52	45	51	44	45	11	-2	3
2770	-1	-4	-12	56	38	40	43	47	43	43	37	40	10	0	1
2775	-1	-5	-13	43	35	42	40	36	42	44	33	35	-2	-1	1
2780	-1	-2	-10	31	33	42	36	29	41	44	30	31	-9	-4	1
2785	0	-1	-3	26	26	34	32	25	35	34	24	27	-2	-3	2

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
800	-7	24	40	40	40	40	40	40	40	40	40	40	40	-3	4
805	-3	3	40	40	40	40	40	40	40	40	40	40	40	0	0
810	-6	0	40	40	40	40	40	40	40	40	40	40	40	-2	2
815	-4	0	40	40	40	40	40	40	40	40	40	40	40	-2	2
820	-1	-3	40	41	43	40	40	40	40	40	40	45	40	-1	1
825	-1	-4	40	40	43	40	40	40	45	42	45	49	40	-1	2
830	-2	1	40	41	44	43	40	40	58	52	55	49	40	-5	3
835	-4	1	40	47	43	44	43	45	54	49	49	46	40	-6	3
840	-3	-2	40	49	43	45	46	46	51	44	44	44	40	-1	2
845	1	-2	40	49	46	49	49	47	49	47	48	51	40	-2	4
850	4	-6	40	49	49	49	49	46	48	47	49	55	40	-1	2
855	11	-8	40	49	51	46	46	45	45	42	52	53	40	0	2
860	25	4	40	47	51	43	45	45	43	40	53	51	40	-2	9
865	5	2	40	40	45	42	45	45	44	41	53	50	40	-8	-1
870	-14	-2	40	40	42	43	47	46	45	41	52	50	40	-4	3
875	-7	0	40	43	46	44	50	44	42	40	49	48	40	0	0
880		-2	40	47	49	46	52	42	40	41	50	52	40	4	
885		-7	40	45	49	47	52	41	40	45	60	68	51	23	
890			40	40	51	46	50	42	41	47	65	86	51		
895			40	45	49	45	49	49	46	45	60	83	45		
900			49	47	49	45	48	53	48	44	50	66	44		
905			40	48	49	46	48	48	45	46	50	62	43		
910			40	50	49	48	48	44	42	47	47	58	41		
915			40	47	52	50	49	49	44	51	50	61	40		
920			40	47	54	51	49	53	46	51	51	61	40		
925			40	45	48	49	49	54	47	46	50	59	40		
930			40	43	47	48	49	53	47	43	48	57	40		
935			40	42	49	47	48	48	48	45	47	50	40		
940			40	43	51	47	51	44	48	45	46	44	40		
945			41	44	52	47	52	47	45	42	45	44	40		
950			44	44	51	47	52	50	46	41	45	45	40		
955			42	41	48	44	45	48	47	41	46	43	40		
960			40	42	46	42	41	47	48	41	46	44	40		
965			40	45	49	44	42	49	46	40	43	45	40		
970			40	47	52	46	46	52	45	40	42	47	40		
975			40	44	48	48	46	53	45	42	45	49	40		
980			40	43	47	50	48	54	45	43	47	49	40		
985			40	45	48	49	48	50	42	44	50	54	40		
990			40	45	48	49	48	47	42	45	54	58	40		
995			40	43	47	47	43	42	45	43	49	55	40		
1000			48	44	47	46	42	41	49	43	48	52	40		
1005			40	48	43	47	46	46	52	47	53	50	40		
1010			40	50	40	48	50	50	56	51	58	48	40		
1015			40	54	48	45	47	51	55	53	50	44	40		
1020			40	56	53	44	46	53	57	57	46	41	40		
1025			40	55	56	46	46	55	59	58	51	41	40		
1030			40	55	56	49	48	58	61	58	53	41	40		
1035			40	42	47	48	50	55	60	55	47	43	40		
1040			40	40	42	50	53	56	61	53	45	46	40		
1045			40	40	49	55	55	62	64	52	44	46	40		
1050			40	41	53	58	57	66	65	52	45	48	40		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1055			40	45	52	57	56	63	59	48	44	47	40		
1060			40	50	53	57	56	62	56	46	43	46	40		
1065			40	51	57	58	56	65	55	47	48	44	40		
1070			40	50	62	61	58	69	54	49	50	42	44		
1075			40	51	66	66	61	65	55	52	45	42	40		
1080			40	52	69	68	62	63	57	53	42	43	40		
1085			40	62	67	66	64	65	58	53	46	47	40		
1090			40	65	65	65	65	67	61	54	46	48	40		
1095			40	64	65	66	66	72	69	55	44	49	40		
1100			40	61	62	66	66	76	73	56	42	51	40		
1105			40	57	57	63	67	74	67	56	43	46	40		
1110			40	54	52	61	68	73	63	54	44	45	40		
1115			40	50	51	60	65	72	63	54	44	48	40		
1120			40	51	53	60	65	70	62	52	44	49	40		
1125			40	48	50	57	66	71	62	52	45	46	40		
1130			40	47	48	55	66	70	63	53	44	44	40		
1135			40	48	50	56	61	66	62	54	41	42	40		
1140			40	46	51	58	58	63	61	56	40	42	40		
1145			40	48	50	57	62	64	61	54	45	48	43		
1150			40	48	51	56	64	66	62	54	49	53	51		
1155			40	46	53	58	62	69	68	57	50	51	40		
1160			40	45	56	61	62	71	74	61	52	49	40		
1165			40	47	54	63	68	74	70	62	52	47	40		
1170			40	46	53	64	72	80	70	64	52	46	40		
1175			40	50	52	63	79	89	79	66	50	41	40		
1180			40	55	52	65	85	98	86	68	48	41	40		
1185			40	53	57	69	86	99	90	70	50	48	40		
1190			40	49	63	73	87	102	94	73	53	52	40		
1195			43	53	66	74	85	104	98	80	60	45	40		
1200			47	55	70	78	88	108	101	85	65	40	40		
1205			40	51	69	84	95	112	102	84	64	44	40		
1210			40	50	68	88	100	116	102	83	62	48	40		
1215			40	45	65	88	101	120	105	84	59	44	40		
1220			40	44	66	89	104	123	107	85	57	41	40		
1225			40	56	75	91	107	125	107	84	54	41	40		
1230			55	63	80	92	109	125	107	83	52	40	40		
1235			58	58	80	92	108	125	108	81	50	40	40		
1240			60	54	78	91	107	124	107	80	48	42	40		
1245			59	52	73	90	108	125	105	79	52	40	40		
1250			54	49	68	88	106	125	103	79	56	40	40		
1255			43	51	67	87	104	122	97	77	56	42	48		
1260			40	53	65	84	100	120	93	76	57	46	65		
1265			40	50	66	80	99	118	91	75	56	48	47		
1270			40	43	66	75	96	118	89	74	55	48	40		
1275			40	40	63	74	93	116	89	73	54	45	40		
1280			43	40	57	72	89	113	89	71	54	45	40		
1285			40	40	50	69	84	106	86	68	51	43	43		
1290			40	43	46	66	82	102	84	66	51	42	50		
1295			40	41	50	68	87	104	85	66	54	46	44		
1300			44	40	54	70	89	105	87	67	56	50	42		
1305			40	40	54	70	87	103	90	71	58	51	51		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1310			40	40	57	72	87	102	92	74	59	50	60		
1315			40	43	61	75	87	100	91	74	59	44	64		
1320			40	44	62	74	87	100	89	73	59	41	64		
1325			40	49	61	72	88	102	87	69	61	43	49		
1330			40	52	60	68	88	103	85	67	62	46	41		
1335			40	46	58	66	86	101	85	66	61	51	55		
1340			40	42	57	65	83	97	84	66	59	57	64		
1345			40	55	55	66	77	95	82	70	59	62	72		
1350			40	64	56	68	73	92	80	72	58	65	74		
1355			40	52	60	71	77	90	84	73	57	60	64		
1360			40	47	63	73	81	90	86	73	53	55	56		
1365			43	42	61	71	82	91	84	67	45	46	58		
1370			50	41	59	71	84	91	82	64	40	41	62		
1375			40	46	57	70	87	86	80	64	49	46	64		
1380			40	53	57	71	87	83	78	66	55	48	64		
1385			40	50	58	75	88	85	76	63	51	44	67		
1390			40	46	57	75	87	87	75	62	48	41	67		
1395			41	45	54	71	85	87	76	64	50	44	59		
1400			52	44	53	69	84	88	78	65	52	46	49		
1405			64	42	53	69	82	91	80	68	55	48	40		
1410			75	42	55	69	81	92	80	71	57	49	40		
1415			63	45	57	68	79	87	77	68	59	47	40		
1420			54	46	60	68	79	83	73	64	58	44	40		
1425			61	49	67	74	77	82	69	57	51	41	40		
1430			66	51	70	75	76	82	66	52	46	41	40		
1435			67	56	74	78	78	81	70	55	48	43	46		
1440			67	57	74	78	79	80	71	57	48	47	64		
1445			61	48	67	74	78	78	66	55	44	51	44		
1450			55	45	61	71	75	75	64	54	43	52	40		
1455			56	56	64	70	72	77	68	52	43	52	45		
1460			53	59	67	70	71	79	69	51	44	49	45		
1465			44	49	60	64	67	76	64	48	46	45	40		
1470			40	47	55	60	66	76	59	45	46	41	40		
1475			43	47	52	59	68	78	61	47	46	42	40		
1480			47	46	51	57	70	78	61	47	45	44	40		
1485			41	44	52	56	69	72	59	47	42	43	40		
1490			40	43	52	55	68	67	58	47	40	43	43		
1495			40	43	51	56	66	66	60	52	42	42	40		
1500			40	42	50	55	63	66	60	54	43	42	40		
1505			40	40	48	55	61	65	59	52	42	42	41		
1510			53	40	46	54	60	63	59	50	42	40	42		
1515			65	40	44	50	58	61	55	49	42	41	40		
1520			72	40	43	48	57	60	51	47	42	43	40		
1525			61	40	47	48	58	61	50	42	43	45	40		
1530			50	45	51	49	58	61	50	40	43	46	40		
1535			41	45	51	47	56	58	51	44	41	47	40		
1540			40	41	49	45	53	55	51	47	41	47	40		
1545			45	45	49	46	51	48	48	47	44	46	40		
1550			50	48	49	48	50	43	47	46	46	45	40		
1555			40	46	52	49	51	45	49	44	44	48	40		
1560			40	50	56	49	54	48	51	43	42	49	40		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1565			40	51	59	50	56	50	54	43	42	46	40		
1570			40	50	60	52	58	53	56	43	42	44	40		
1575			40	51	59	52	60	60	59	40	47	49	40		
1580			40	50	57	53	62	65	62	40	49	51	40		
1585			40	46	57	58	63	66	66	43	44	45	40		
1590			54	46	57	62	65	66	68	46	42	41	40		
1595			47	44	58	62	70	67	67	50	47	42	40		
1600			40	41	57	62	72	68	67	55	50	43	40		
1605			40	45	57	63	73	68	68	58	49	40	42		
1610			40	50	58	64	74	67	69	60	49	41	48		
1615			45	51	58	67	73	68	67	58	45	42	53		
1620			44	51	59	67	70	68	65	56	41	44	50		
1625			40	51	61	64	72	73	68	52	41	49	40		
1630			40	50	61	63	74	75	68	50	40	50	40		
1635			40	49	60	65	79	75	70	53	44	54	40		
1640			40	49	59	68	82	74	72	55	46	56	40		
1645			40	52	61	71	80	76	70	55	43	49	40		
1650			40	51	62	73	80	80	70	55	43	45	40		
1655			40	40	58	71	82	85	72	59	47	46	40		
1660			40	40	58	73	84	90	75	62	47	45	40		
1665			40	43	60	75	86	92	79	63	45	46	40		
1670			40	48	63	77	88	94	83	64	43	47	40		
1675			40	50	65	80	90	96	86	66	45	44	40		
1680			40	48	67	83	90	99	89	69	46	41	40		
1685			40	43	64	84	93	100	92	70	46	40	40		
1690			40	40	60	84	93	102	94	72	47	40	40		
1695			40	44	60	82	94	105	94	73	50	40	40		
1700			40	48	59	81	94	108	96	74	53	40	40		
1705			40	56	56	79	94	108	100	79	59	41	40		
1710			40	56	53	78	94	110	102	82	64	42	40		
1715			40	47	54	77	94	111	104	82	63	47	40		
1720			40	41	56	78	96	110	103	82	63	51	40		
1725			40	49	58	81	96	106	97	78	63	56	40		
1730			40	50	56	80	94	100	91	76	62	58	40		
1735			40	44	59	79	91	94	86	73	59	52	40		
1740			40	40	60	79	87	89	82	70	57	47	40		
1745			40	41	55	79	88	92	83	70	54	45	40		
1750			40	42	52	77	88	91	81	67	52	43	42		
1755			40	45	51	74	86	79	68	61	51	49	41		
1760			40	46	50	70	83	71	59	57	52	54	45		
1765			40	50	51	68	77	72	60	58	52	51	59		
1770			40	53	52	66	72	73	61	59	51	50	67		
1775			40	50	48	65	71	75	63	58	46	52	61		
1780			40	48	45	66	72	76	64	59	42	53	53		
1785			45	53	43	65	70	70	65	53	42	49	43		
1790			56	56	41	64	70	67	66	52	42	48	40		
1795			67	59	46	64	70	73	64	55	44	45	42		
1800			72	60	50	65	74	77	66	59	46	44	43		
1805			55	52	46	62	79	82	71	61	46	45	40		
1810			40	45	44	61	83	85	75	62	47	45	40		
1815			40	40	45	61	84	85	72	56	46	41	40		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
1820			40	40	47	62	85	85	71	54	45	41	40		
1825			40	40	48	64	88	88	75	58	47	50	40		
1830			40	43	50	66	89	90	80	62	49	55	40		
1835			40	45	53	69	83	88	83	66	51	48	40		
1840			40	47	55	73	82	87	84	69	50	43	40		
1845			40	45	52	73	91	90	84	64	51	45	40		
1850			40	43	48	72	96	90	83	61	51	49	40		
1855			40	40	46	70	92	86	84	66	49	42	40		
1860			40	40	46	69	87	83	84	68	47	40	40		
1865			40	40	52	73	83	86	82	65	49	43	40		
1870			40	43	55	75	80	87	81	64	51	45	40		
1875			48	43	54	70	81	88	81	63	54	42	40		
1880			58	45	53	69	83	87	81	63	56	41	40		
1885			56	53	58	70	88	86	82	64	54	45	40		
1890			54	57	60	71	91	85	83	65	52	49	40		
1895			55	47	57	70	85	81	87	63	45	48	40		
1900			52	40	51	68	81	78	89	61	40	48	41		
1905			45	40	47	65	82	79	90	57	40	54	40		
1910			40	40	44	62	81	78	89	55	40	60	40		
1915			40	40	44	62	77	76	82	55	40	60	40		
1920			40	40	44	64	75	75	77	53	41	50	40		
1925			40	40	41	65	81	75	74	52	41	40	40		
1930			40	40	40	66	85	77	70	52	40	40	40		
1935			41	40	42	65	88	81	69	53	43	40	40		
1940			40	40	43	63	91	85	69	55	43	40	40		
1945			40	40	43	63	88	86	72	58	42	40	40		
1950			40	40	44	63	86	89	76	62	43	40	40		
1955			40	40	43	66	87	96	80	66	50	40	40		
1960			40	40	46	68	87	101	82	67	52	40	40		
1965			40	40	53	70	87	98	89	69	54	40	40		
1970			40	40	46	73	88	98	95	73	59	40	40		
1975			40	40	44	74	92	103	95	81	70	40	40		
1980			40	40	43	73	94	106	95	82	72	45	40		
1985			40	40	48	75	91	106	98	83	72	48	40		
1990			40	40	51	75	89	106	99	84	72	46	40		
1995			40	40	51	74	92	103	98	86	74	51	40		
2000			40	44	53	73	96	102	96	85	73	51	40		
2005			42	45	50	74	93	100	94	79	63	42	40		
2010			57	43	46	73	87	99	92	74	57	40	40		
2015			40	40	41	65	82	98	93	72	54	40	40		
2020			40	40	40	62	79	95	91	71	53	40	40		
2025			40	40	47	64	78	87	90	73	61	45	40		
2030			40	40	52	63	73	78	87	73	65	52	40		
2035			40	43	51	59	64	71	84	71	61	54	40		
2040			51	48	52	56	56	64	79	68	57	57	40		
2045			40	51	49	51	49	54	70	60	50	60	41		
2050			40	54	49	50	44	45	61	53	45	57	40		
2055			40	49	50	53	45	44	55	55	46	48	40		
2060			44	46	52	57	46	45	51	56	47	40	40		
2065			40	49	60	58	51	51	52	54	49	48	40		
2070			40	51	62	57	55	56	52	52	49	55	44		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2075			40	51	58	56	56	56	54	53	49	69	56		
2080			40	48	53	55	56	58	56	54	52	72	61		
2085			40	43	47	53	57	65	61	63	57	77	48		
2090			40	40	43	52	58	71	66	67	64	75	40		
2095			40	40	50	56	62	75	70	66	54	50	40		
2100			40	40	52	60	66	80	74	62	41	40	40		
2105			40	42	51	64	72	86	77	64	43	40	40		
2110			40	43	49	65	74	90	79	66	43	41	93		
2115			40	43	51	70	74	91	81	65	45	48	89		
2120			40	42	52	72	75	92	81	64	44	47	83		
2125			40	42	52	73	79	94	80	65	47	44	82		
2130			40	42	54	74	83	96	80	67	50	42	81		
2135			40	44	55	74	85	97	85	71	52	43	74		
2140			40	46	58	74	87	98	87	75	54	42	70		
2145			40	47	60	70	82	98	88	74	56	46	75		
2150			45	48	61	69	79	97	88	73	55	49	84		
2155			43	46	61	73	79	97	89	73	52	45	78		
2160			43	44	60	76	79	93	86	70	48	45	76		
2165			47	48	60	72	77	86	80	64	43	42	66		
2170			53	55	60	68	74	79	74	60	40	44	40		
2175			58	60	60	64	71	71	69	56	40	41	40		
2180			62	62	59	60	66	64	63	53	40	40	40		
2185			49	52	60	58	60	65	57	49	40	46	40		
2190			34	46	59	56	55	63	52	47	40	52	40		
2195			25	43	54	53	50	51	45	43	43	52	40		
2200			20	41	49	50	47	42	42	43	46	52	40		
2205			30	40	49	47	45	45	47	45	40	53	40		
2210			42	40	48	45	45	48	52	47	40	54	42		
2215			59	47	44	42	44	46	51	44	40	51	40		
2220			68	53	43	41	45	46	49	42	40	46	40		
2225			54	52	45	45	46	44	48	44	40	48	40		
2230			44	48	46	48	46	43	49	47	40	50	40		
2235			41	43	41	44	43	44	50	47	41	50	40		
2240			40	40	40	43	42	45	51	46	40	48	40		
2245			40	43	45	46	44	49	48	45	42	43	40		
2250			40	46	49	50	47	52	49	45	43	40	40		
2255			40	47	52	51	48	53	52	46	41	40	40		
2260			52	48	53	52	49	54	54	47	41	43	40		
2265			44	49	52	51	50	55	53	48	40	48	40		
2270			40	50	50	52	52	57	54	49	41	51	40		
2275			40	52	50	53	54	58	54	48	43	47	40		
2280			40	53	50	55	56	61	57	51	46	44	40		
2285			40	45	51	58	61	65	66	58	45	42	40		
2290			40	40	53	61	65	70	73	61	45	45	40		
2295			40	43	56	63	65	74	73	60	46	46	40		
2300			40	47	60	66	67	79	75	61	47	46	40		
2305			40	53	62	69	76	87	81	67	48	50	40		
2310			40	54	64	71	82	93	86	71	49	49	40		
2315			40	45	63	71	83	95	87	70	51	42	40		
2320			40	40	61	70	83	96	88	70	53	42	40		
2325			40	40	60	72	85	100	91	74	57	40	40		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2330			40	40	58	72	85	102	92	76	58	40	40		
2335			40	46	56	71	84	103	92	74	57	42	40		
2340			49	49	54	70	82	102	94	73	57	48	42		
2345			51	47	53	70	84	101	97	72	55	52	43		
2350			49	44	52	69	85	100	96	70	51	53	42		
2355			40	40	48	64	80	96	91	63	47	49	40		
2360			40	40	44	62	79	94	88	59	43	46	40		
2365			40	40	47	65	84	96	91	62	44	41	40		
2370			40	41	49	68	88	99	93	66	46	40	42		
2375			42	42	48	70	89	104	93	67	45	40	45		
2380			50	43	48	72	90	109	94	69	46	40	45		
2385			40	41	52	76	93	113	97	70	50	40	40		
2390			40	40	55	79	96	117	100	71	52	40	40		
2395			40	40	57	82	100	120	106	75	50	47	40		
2400			40	40	59	84	103	122	111	79	50	51	40		
2405			40	48	63	88	105	125	112	82	52	45	40		
2410			40	53	65	89	106	127	112	84	53	40	40		
2415			40	50	65	90	109	129	115	85	56	40	40		
2420			40	46	64	91	111	131	115	85	57	40	40		
2425			40	42	61	88	109	133	113	81	55	41	40		
2430			40	40	60	87	108	134	109	77	51	41	40		
2435			40	44	62	86	105	134	106	70	45	40	40		
2440			40	48	63	86	103	133	105	66	40	40	40		
2445			40	46	62	85	105	130	104	66	42	40	40		
2450			40	44	62	85	105	128	105	69	46	40	40		
2455			40	40	59	84	102	128	107	70	49	41	40		
2460			40	40	57	83	100	128	109	72	52	42	40		
2465			40	40	63	88	104	128	115	85	57	42	40		
2470			40	42	66	89	103	124	113	92	60	44	49		
2475			40	54	59	78	92	107	91	74	49	46	40		
2480			40	60	52	67	81	92	73	62	41	48	40		
2485			40	45	48	60	73	85	68	60	40	46	40		
2490			40	40	46	57	69	80	66	58	40	45	40		
2495			40	43	48	61	72	77	71	60	41	43	40		
2500			40	50	50	64	74	74	74	60	45	41	40		
2505			40	58	55	66	74	71	70	58	49	45	40		
2510			40	62	59	66	72	67	66	57	53	48	40		
2515			40	62	61	66	71	67	63	58	56	42	40		
2520			40	61	62	65	70	65	59	57	53	40	40		
2525			40	63	65	65	73	64	55	56	49	40	40		
2530			40	66	66	65	75	63	53	54	45	43	40		
2535			40	71	63	66	74	61	58	53	43	42	40		
2540			40	72	62	65	70	58	59	52	43	42	40		
2545			40	66	64	59	59	48	52	54	42	49	40		
2550			40	61	64	55	53	43	47	52	41	53	43		
2555			40	56	59	60	63	55	47	47	42	51	40		
2560			40	54	55	64	71	63	48	44	41	50	40		
2565			40	58	49	62	67	58	47	46	40	45	40		
2570			40	61	44	62	65	55	47	47	40	42	40		
2575			40	62	41	59	64	57	51	47	40	42	40		
2580			40	63	40	58	62	59	53	47	40	40	40		

THICKNESS AFTER MILLING

CH	-25.00	-21.40	-18.75	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00	18.75	22.00	25.00
2585			40	65	45	59	58	64	50	45	40	43	40		
2590			43	64	47	59	54	66	48	46	43	47	40		
2595			40	58	47	59	54	61	46	49	42	47	40		
2600			40	54	48	58	52	59	46	53	42	46	40		
2605			40	51	48	60	54	59	49	54	41	46	40		
2610			40	47	47	60	57	59	52	56	40	45	40		
2615			40	47	41	59	64	55	57	58	41	43	40		
2620			47	47	40	59	68	54	59	58	41	42	40		
2625			40	48	40	61	68	55	55	54	43	45	40		
2630			40	49	42	61	67	56	52	52	45	48	40		
2635			40	52	42	58	65	61	51	54	47	45	40		
2640			40	45	41	54	60	63	49	54	46	43	40		
2645			40	43	40	47	50	54	44	50	44	41	40		
2650			40	46	41	42	43	48	41	48	42	40	40		
2655			40	47	40	43	43	48	40	48	42	41	40		
2660			40	47	40	44	42	49	41	48	45	41	40		
2665			40	48	40	45	44	49	45	49	52	44	40		
2670			40	50	41	46	47	51	49	50	55	47	40		
2675			40	51	47	48	56	57	52	49	48	49	40		
2680			40	52	49	48	61	60	52	49	42	52	40		
2685			40	44	44	44	58	56	49	48	40	50	40		
2690			40	41	41	41	56	52	46	49	40	53	40		
2695			40	47	48	43	58	48	44	50	41	47	40		
2700			40	51	55	44	60	48	45	52	46	45	40		
2705			40	53	60	49	63	51	52	53	48	46	40		
2710			40	50	63	53	66	52	57	56	49	40	40		
2715		-3	40	43	48	49	64	48	57	56	47	40	40	-24	
2720		-10	40	40	40	47	62	46	56	57	45	40	40	-29	
2725	-6	-13	40	40	40	49	60	47	56	59	51	50	40	-1	
2730	-1	-8	40	47	40	50	58	50	55	58	52	57	40	-9	12
2735	17	-7	40	56	40	55	60	52	53	52	49	55	40	-11	14
2740	2	31	40	61	40	59	60	56	51	50	49	54	40	6	1
2745	4	-4	40	56	41	58	52	60	51	55	56	54	40	-4	1
2750	-2	-4	40	52	41	56	47	62	52	60	62	53	40	-4	4
2755	-2	-4	40	53	44	60	53	60	50	62	58	49	40	-3	3
2760	-1	-4	40	56	45	60	55	56	46	61	52	46	40	-3	3
2765	-1	-4	40	59	42	49	49	52	45	51	44	45	40	-2	3
2770	-1	-4	40	56	40	40	43	47	43	43	40	40	40	0	1
2775	-1	-5	40	43	40	42	40	40	42	44	40	40	40	-1	1
2780	-1	-2	40	40	40	42	40	40	41	44	40	40	40	-4	1
2785	0	-1	40	40	40	40	40	40	40	40	40	40	40	-3	2
			42	47	53	63	71	76	70	59	49	47	43		
								56							

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
800	-2.1	-1.7	-1.0	-1.6	-1.0	-1.1		0.8	0.9	0.2	0.6	0.1
805	-2.2	-1.2	-1.1	-1.3	-1.1	-1.1		0.9	0.6	0.4	0.7	0.5
810	-1.8	-1.0	-1.2	-1.2	-1.3	-1.1		0.9	0.4	0.6	0.7	0.2
815	-1.7	-1.0	-1.2	-1.3	-1.4	-1.1		0.9	0.3	0.6	0.7	0.2
820	-1.5	-1.0	-1.2	-1.4	-1.4	-1.1		0.9	0.4	0.6	0.7	0.0
825	-1.4	-1.1	-1.2	-1.3	-1.4	-1.2		0.8	0.8	0.6	0.7	-0.3
830	-1.5	-1.3	-1.2	-1.3	-1.4	-1.2		0.8	1.1	0.5	0.7	-0.5
835	-1.7	-1.3	-1.4	-1.2	-1.3	-1.2		0.7	0.9	0.5	0.6	-0.5
840	-1.6	-1.4	-1.4	-1.2	-1.2	-1.2		0.7	0.8	0.5	0.6	-0.5
845	-1.6	-1.1	-1.3	-1.2	-1.2	-1.3		0.7	0.8	0.7	0.7	-0.6
850	-1.4	-1.0	-1.2	-1.2	-1.2	-1.3		0.7	0.9	0.8	0.8	-0.7
855	-1.4	-1.0	-1.1	-1.3	-1.2	-1.2		0.8	0.9	0.8	1.1	-0.9
860	-1.7	-1.1	-1.1	-1.4	-1.1	-1.2		0.9	0.9	0.8	1.2	-1.0
865	-1.3	-1.4	-1.0	-1.2	-1.0	-1.1		1.0	1.0	0.9	1.2	-1.0
870	-1.3	-1.7	-1.0	-1.1	-1.0	-1.1		1.0	1.0	1.0	1.2	-1.0
875	-1.2	-1.6	-1.0	-1.1	-1.0	-1.3		0.9	1.0	1.1	1.2	-1.5
880	-1.3	-2.2	-1.0	-1.1	-0.9	-1.3		0.9	1.1	1.2	1.3	-2.1
885	-1.5	-2.3	-0.9	-1.1	-0.9	-1.4		0.9	1.2	1.3	1.5	-2.1
890		-1.7	-0.7	-1.2	-0.9	-1.3		1.1	1.2	1.4	1.6	-1.9
895		-2.3	-0.9	-1.1	-0.9	-1.0		1.3	1.2	1.3	1.6	-1.9
900		-2.5	-1.0	-1.1	-0.9	-0.9		1.5	1.2	1.2	1.4	-2.1
905		-2.3	-1.0	-1.1	-0.9	-1.0		1.4	1.3	1.3	1.3	-2.2
910		-2.1	-1.0	-1.0	-1.0	-1.1		1.3	1.3	1.4	1.2	-2.2
915		-2.3	-0.9	-1.1	-1.0	-1.0		1.4	1.2	1.4	1.1	-2.2
920		-2.2	-0.8	-1.1	-1.0	-0.9		1.5	1.2	1.4	1.1	-2.2
925		-2.1	-0.9	-1.0	-1.0	-0.9		1.5	1.2	1.2	1.2	-2.3
930		-2.0	-0.9	-1.0	-1.0	-0.9		1.4	1.2	1.1	1.2	-2.3
935		-2.2	-0.8	-1.1	-1.0	-1.1		1.3	1.3	1.1	1.1	-2.4
940		-2.3	-0.8	-1.1	-1.0	-1.2		1.1	1.4	1.2	1.1	-2.6
945		-2.4	-0.9	-1.2	-0.9	-1.2		1.1	1.2	1.2	1.2	-2.5
950		-2.5	-0.9	-1.2	-1.0	-1.1		1.2	1.1	1.1	1.3	-2.5
955		-2.5	-0.9	-1.2	-1.1	-1.0		1.3	1.2	1.1	1.2	-2.6
960		-2.4	-1.0	-1.2	-1.1	-0.9		1.4	1.2	1.0	1.2	-2.6
965		-2.2	-1.0	-1.3	-1.1	-0.9		1.4	1.1	1.0	1.1	-2.4
970		-2.0	-1.0	-1.3	-1.1	-0.9		1.3	0.9	1.0	1.1	-2.4
975		-2.2	-1.0	-1.1	-1.1	-0.9		1.3	0.9	1.0	1.1	-2.4
980		-2.3	-1.0	-1.0	-1.1	-0.9		1.3	0.8	1.0	1.1	-2.4
985		-1.9	-1.0	-1.0	-1.0	-1.0		1.1	0.8	1.0	1.0	-2.4
990		-1.7	-1.0	-1.0	-1.0	-1.1		1.0	0.9	1.0	1.0	-2.4

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
995		-2.3	-0.9	-1.1	-1.1	-1.0		1.0	1.0	0.9	0.9	-2.3
1000		-2.6	-0.9	-1.1	-1.1	-1.0		0.9	1.1	0.7	0.7	-2.4
1005		-1.9	-1.1	-0.9	-1.0	-1.0		0.9	1.0	0.6	0.7	-2.6
1010		-1.5	-1.3	-0.8	-0.9	-1.0		0.9	1.0	0.6	0.6	-2.8
1015		-1.7	-1.2	-1.1	-0.9	-0.9		1.0	0.9	0.6	0.3	-2.7
1020		-2.0	-1.1	-1.3	-0.9	-0.8		1.1	0.9	0.6	0.0	-2.6
1025		-1.9	-1.0	-1.3	-1.0	-0.7		1.1	0.8	0.5	0.1	-2.8
1030		-1.9	-1.0	-1.2	-1.0	-0.7		1.0	0.7	0.4	0.1	-2.8
1035		-2.2	-0.9	-1.0	-0.9	-0.8		0.8	0.6	0.2	-0.1	-2.6
1040		-2.3	-0.8	-0.8	-0.9	-0.9		0.7	0.5	0.1	-0.1	-2.5
1045		-2.1	-0.7	-0.9	-1.0	-0.8		0.7	0.3	-0.1	-0.2	-2.4
1050		-1.8	-0.7	-0.9	-1.0	-0.7		0.7	0.2	-0.2	-0.2	-2.4
1055		-1.5	-0.8	-0.9	-1.0	-0.8		0.5	0.0	-0.2	-0.2	-2.4
1060		-1.1	-0.9	-0.9	-1.0	-0.8		0.4	-0.1	-0.3	-0.3	-2.4
1065		-0.7	-0.8	-1.0	-1.0	-0.7		0.4	-0.3	-0.3	-0.2	-2.6
1070		-0.4	-0.7	-1.0	-1.1	-0.7		0.3	-0.5	-0.3	-0.3	-2.7
1075		-0.6	-0.6	-1.0	-1.1	-0.9		0.1	-0.5	-0.4	-0.6	-2.6
1080		-0.7	-0.6	-1.0	-1.2	-1.0		-0.1	-0.5	-0.5	-0.8	-2.5
1085		-0.5	-1.0	-1.1	-1.1	-1.0		-0.2	-0.6	-0.6	-0.8	-2.5
1090		-0.7	-1.1	-1.1	-1.1	-1.1		-0.3	-0.7	-0.8	-0.9	-2.4
1095		-1.4	-1.2	-1.2	-1.2	-1.0		-0.3	-0.7	-1.1	-1.1	-2.4
1100		-1.8	-1.2	-1.1	-1.3	-1.0		-0.3	-0.8	-1.2	-1.3	-2.3
1105		-1.5	-1.3	-1.2	-1.2	-1.1		-0.5	-1.0	-1.1	-1.3	-2.4
1110		-1.4	-1.4	-1.1	-1.2	-1.2		-0.6	-1.1	-1.1	-1.3	-2.5
1115		-1.4	-1.3	-1.1	-1.3	-1.1		-0.6	-1.1	-1.2	-1.3	-2.4
1120		-1.3	-1.3	-1.2	-1.2	-1.1		-0.7	-1.1	-1.3	-1.2	-2.4
1125		-1.3	-1.3	-1.1	-1.1	-1.1		-0.8	-1.2	-1.2	-1.2	-2.5
1130		-1.3	-1.3	-1.1	-1.0	-1.1		-0.9	-1.1	-1.3	-1.2	-2.5
1135		-1.5	-1.2	-1.1	-1.1	-1.0		-0.8	-1.1	-1.2	-1.4	-2.5
1140		-1.5	-1.1	-1.0	-1.2	-1.0		-0.8	-1.0	-1.1	-1.5	-2.4
1145		-0.8	-1.1	-1.0	-1.1	-1.1		-0.9	-1.1	-1.2	-1.3	-2.4
1150		-0.3	-1.1	-1.0	-1.0	-1.0		-0.9	-1.1	-1.2	-1.2	-2.4
1155		-0.7	-0.9	-1.0	-1.0	-0.9		-0.8	-1.0	-1.3	-1.2	-2.5
1160		-1.0	-0.8	-1.0	-1.1	-0.8		-0.7	-0.9	-1.3	-1.3	-2.6
1165		-0.9	-0.9	-0.9	-1.0	-0.9		-0.8	-1.1	-1.2	-1.3	-2.6
1170		-1.1	-0.9	-0.9	-0.9	-0.9		-0.8	-1.2	-1.2	-1.4	-2.7
1175		-1.5	-1.0	-0.8	-0.7	-0.8		-0.7	-1.3	-1.3	-1.5	-2.7
1180		-1.6	-1.2	-0.8	-0.6	-0.7		-0.6	-1.3	-1.5	-1.6	-2.7
1185		-1.9	-1.0	-0.8	-0.7	-0.7		-0.6	-1.2	-1.5	-1.6	-2.6

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1190		-2.1	-0.7	-0.8	-0.7	-0.6		-0.6	-1.2	-1.5	-1.6	-2.5
1195		-2.2	-0.7	-0.9	-0.8	-0.5		-0.5	-1.1	-1.5	-1.6	-2.9
1200		-2.3	-0.6	-0.9	-0.8	-0.5		-0.5	-1.2	-1.4	-1.6	-3.2
1205		-2.1	-0.6	-0.6	-0.7	-0.5		-0.5	-1.3	-1.5	-1.6	-3.0
1210		-1.9	-0.5	-0.5	-0.7	-0.5		-0.6	-1.3	-1.5	-1.6	-2.9
1215		-1.8	-0.5	-0.4	-0.6	-0.4		-0.5	-1.4	-1.5	-1.7	-2.9
1220		-1.7	-0.4	-0.4	-0.6	-0.4		-0.5	-1.4	-1.6	-1.8	-2.9
1225		-2.0	-0.5	-0.5	-0.6	-0.5		-0.5	-1.4	-1.6	-1.8	-2.8
1230		-2.3	-0.5	-0.6	-0.5	-0.5		-0.6	-1.4	-1.6	-1.9	-2.9
1235		-2.5	-0.4	-0.7	-0.6	-0.5		-0.5	-1.4	-1.7	-1.9	-2.8
1240		-2.6	-0.3	-0.6	-0.6	-0.5		-0.5	-1.4	-1.7	-1.9	-2.7
1245		-2.6	-0.4	-0.5	-0.5	-0.5		-0.5	-1.5	-1.7	-1.8	-2.8
1250		-2.6	-0.5	-0.5	-0.5	-0.4		-0.5	-1.6	-1.6	-1.7	-2.9
1255		-2.3	-0.5	-0.5	-0.5	-0.5		-0.5	-1.7	-1.5	-1.6	-2.9
1260		-2.1	-0.6	-0.5	-0.6	-0.4		-0.5	-1.7	-1.4	-1.5	-2.8
1265		-1.9	-0.5	-0.6	-0.5	-0.4		-0.5	-1.7	-1.4	-1.5	-2.7
1270		-1.9	-0.4	-0.7	-0.4	-0.4		-0.4	-1.8	-1.4	-1.5	-2.7
1275		-2.3	-0.4	-0.7	-0.5	-0.3		-0.4	-1.7	-1.4	-1.5	-2.7
1280		-2.6	-0.5	-0.7	-0.6	-0.3		-0.3	-1.6	-1.5	-1.5	-2.7
1285		-2.4	-0.8	-0.6	-0.7	-0.5		-0.4	-1.5	-1.5	-1.5	-2.7
1290		-2.0	-1.0	-0.6	-0.7	-0.6		-0.4	-1.5	-1.5	-1.5	-2.7
1295		-2.3	-0.9	-0.7	-0.6	-0.7		-0.5	-1.5	-1.5	-1.4	-2.7
1300		-2.6	-0.7	-0.7	-0.6	-0.7		-0.6	-1.4	-1.5	-1.3	-2.7
1305		-2.4	-0.7	-0.7	-0.7	-0.7		-0.6	-1.3	-1.5	-1.4	-2.7
1310		-2.3	-0.7	-0.7	-0.7	-0.7		-0.6	-1.2	-1.5	-1.5	-2.7
1315		-2.3	-0.6	-0.8	-0.8	-0.8		-0.6	-1.2	-1.4	-1.5	-2.9
1320		-2.2	-0.6	-0.8	-0.8	-0.8		-0.6	-1.3	-1.4	-1.4	-3.0
1325		-2.2	-0.8	-0.9	-0.7	-0.8		-0.6	-1.4	-1.5	-1.3	-3.0
1330		-2.1	-1.0	-1.0	-0.6	-0.7		-0.6	-1.5	-1.5	-1.2	-2.9
1335		-2.0	-0.9	-1.0	-0.7	-0.8		-0.6	-1.4	-1.5	-1.2	-2.8
1340		-2.0	-0.8	-1.0	-0.7	-0.8		-0.6	-1.3	-1.5	-1.2	-2.6
1345		-1.6	-1.2	-0.9	-1.0	-0.7		-0.5	-1.3	-1.3	-1.3	-2.4
1350		-1.2	-1.5	-0.9	-1.1	-0.7		-0.5	-1.3	-1.2	-1.4	-2.3
1355		-1.6	-1.0	-1.0	-1.1	-0.9		-0.6	-1.1	-1.3	-1.5	-2.4
1360		-2.0	-0.8	-1.0	-1.0	-1.0		-0.7	-1.1	-1.4	-1.6	-2.4
1365		-2.5	-0.7	-1.0	-1.0	-0.9		-0.7	-1.2	-1.4	-1.7	-2.5
1370		-2.7	-0.8	-0.9	-0.9	-1.0		-0.8	-1.2	-1.5	-1.7	-2.5
1375		-2.3	-1.0	-0.9	-0.8	-1.2		-1.0	-1.1	-1.4	-1.4	-2.6
1380		-1.9	-1.1	-0.9	-0.9	-1.3		-1.1	-1.1	-1.3	-1.4	-2.7

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1385		-2.0	-1.1	-0.8	-0.9	-1.3		-1.0	-1.2	-1.3	-1.4	-2.7
1390		-2.2	-1.0	-0.8	-1.0	-1.3		-1.0	-1.3	-1.3	-1.4	-2.7
1395		-2.4	-1.1	-0.9	-1.0	-1.2		-0.9	-1.3	-1.3	-1.4	-2.7
1400		-2.7	-1.1	-0.9	-0.9	-1.2		-0.9	-1.3	-1.3	-1.4	-2.7
1405		-3.1	-1.0	-0.9	-1.0	-1.0		-0.7	-1.3	-1.3	-1.4	-2.7
1410		-3.3	-1.0	-0.9	-1.0	-1.0		-0.7	-1.3	-1.3	-1.4	-2.7
1415		-2.9	-1.0	-1.0	-1.0	-1.0		-0.7	-1.3	-1.2	-1.3	-2.8
1420		-2.7	-0.9	-1.0	-1.0	-1.1		-0.9	-1.3	-1.2	-1.2	-2.9
1425		-2.8	-0.7	-1.0	-1.1	-1.0		-0.8	-1.3	-1.3	-1.2	-2.8
1430		-2.9	-0.7	-1.1	-1.1	-1.0		-0.8	-1.4	-1.4	-1.2	-2.6
1435		-2.8	-0.7	-1.1	-1.1	-1.0		-0.9	-1.3	-1.4	-1.2	-2.6
1440		-2.8	-0.7	-1.1	-1.1	-1.1		-0.9	-1.2	-1.4	-1.3	-2.5
1445		-2.8	-0.7	-1.0	-1.1	-1.1		-1.0	-1.3	-1.3	-1.3	-2.3
1450		-2.7	-0.8	-1.0	-1.1	-1.1		-1.0	-1.3	-1.3	-1.3	-2.3
1455		-2.5	-1.0	-1.1	-1.1	-1.0		-0.9	-1.2	-1.4	-1.3	-2.3
1460		-2.3	-1.0	-1.1	-1.2	-1.0		-0.8	-1.3	-1.5	-1.2	-2.4
1465		-2.3	-1.0	-1.1	-1.1	-0.9		-0.7	-1.3	-1.4	-1.1	-2.5
1470		-2.3	-1.0	-1.1	-1.1	-0.9		-0.7	-1.4	-1.4	-1.0	-2.6
1475		-2.4	-1.1	-1.0	-1.0	-0.9		-0.7	-1.4	-1.4	-1.1	-2.6
1480		-2.5	-1.1	-1.0	-0.8	-0.9		-0.8	-1.4	-1.4	-1.1	-2.5
1485		-2.4	-1.0	-1.1	-0.8	-1.0		-0.9	-1.3	-1.3	-1.1	-2.5
1490		-2.2	-0.9	-1.1	-0.8	-1.1		-1.0	-1.2	-1.3	-1.2	-2.4
1495		-1.8	-1.0	-1.1	-0.9	-1.1		-1.0	-1.1	-1.2	-1.3	-2.5
1500		-1.8	-1.0	-1.0	-1.0	-1.0		-0.9	-1.1	-1.1	-1.3	-2.5
1505		-2.4	-0.9	-1.0	-1.0	-1.0		-0.9	-1.1	-1.2	-1.3	-2.5
1510		-2.9	-0.9	-0.9	-1.0	-1.0		-0.9	-1.1	-1.2	-1.3	-2.6
1515		-3.2	-1.0	-1.0	-0.9	-1.0		-0.9	-1.1	-1.1	-1.2	-2.5
1520		-3.3	-1.0	-1.0	-0.9	-1.0		-0.9	-1.2	-1.1	-1.2	-2.5
1525		-3.0	-0.9	-1.1	-0.8	-1.0		-0.9	-1.3	-1.2	-1.0	-2.4
1530		-2.6	-0.9	-1.1	-0.8	-1.0		-0.9	-1.3	-1.3	-0.9	-2.4
1535		-2.4	-0.9	-1.1	-0.8	-1.0		-0.9	-1.2	-1.2	-1.1	-2.3
1540		-2.4	-0.8	-1.1	-0.8	-1.0		-0.9	-1.1	-1.1	-1.2	-2.3
1545		-2.4	-0.9	-1.1	-0.9	-1.1		-1.0	-1.0	-1.0	-1.1	-2.4
1550		-2.5	-1.0	-1.0	-1.0	-1.2		-1.1	-0.9	-1.0	-1.1	-2.5
1555		-2.3	-0.9	-1.1	-1.0	-1.1		-1.1	-0.9	-1.1	-1.0	-2.4
1560		-2.0	-0.9	-1.1	-0.9	-1.1		-1.1	-0.9	-1.2	-1.1	-2.3
1565		-1.8	-0.8	-1.2	-0.9	-1.1		-1.1	-0.9	-1.3	-1.1	-2.4
1570		-1.6	-0.8	-1.2	-0.9	-1.1		-1.1	-0.9	-1.3	-1.1	-2.4
1575		-1.7	-0.9	-1.2	-0.9	-1.0		-1.0	-1.0	-1.5	-0.9	-2.4

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1580		-1.8	-0.9	-1.1	-0.9	-1.0		-0.9	-1.1	-1.6	-0.8	-2.4
1585		-2.3	-0.8	-1.1	-1.0	-1.0		-0.9	-1.0	-1.6	-1.0	-2.5
1590		-2.7	-0.9	-1.0	-1.1	-1.1		-0.9	-0.9	-1.6	-1.1	-2.5
1595		-2.6	-0.8	-1.0	-1.0	-1.2		-1.0	-1.0	-1.4	-1.1	-2.6
1600		-2.5	-0.8	-1.0	-0.9	-1.3		-1.1	-1.0	-1.3	-1.2	-2.7
1605		-2.3	-0.9	-1.0	-0.9	-1.3		-1.1	-1.0	-1.3	-1.3	-2.7
1610		-2.2	-1.0	-1.0	-0.9	-1.4		-1.1	-0.9	-1.2	-1.3	-2.7
1615		-2.3	-1.0	-0.9	-1.0	-1.3		-1.1	-1.0	-1.1	-1.3	-2.6
1620		-2.3	-1.0	-0.9	-1.1	-1.2		-1.0	-1.0	-1.1	-1.3	-2.4
1625		-2.0	-0.9	-1.0	-1.0	-1.1		-0.8	-1.0	-1.3	-1.2	-2.3
1630		-1.9	-0.8	-1.1	-0.9	-1.1		-0.8	-1.0	-1.3	-1.1	-2.2
1635		-1.9	-0.8	-1.0	-0.8	-1.2		-0.8	-0.9	-1.3	-1.1	-2.2
1640		-1.9	-0.9	-0.9	-0.8	-1.3		-0.8	-0.8	-1.2	-1.0	-2.2
1645		-1.8	-0.9	-0.9	-0.9	-1.2		-0.6	-0.9	-1.1	-1.1	-2.3
1650		-1.7	-0.8	-0.8	-0.9	-1.1		-0.5	-0.9	-1.0	-1.0	-2.4
1655		-1.7	-0.6	-0.8	-0.9	-1.0		-0.4	-0.9	-0.9	-0.9	-2.5
1660		-1.6	-0.6	-0.7	-0.9	-1.0		-0.3	-0.9	-0.9	-1.0	-2.6
1665		-1.5	-0.7	-0.7	-0.9	-0.9		-0.3	-0.9	-0.9	-1.0	-2.5
1670		-1.4	-0.7	-0.7	-0.9	-0.9		-0.3	-0.8	-1.0	-1.1	-2.4
1675		-1.3	-0.7	-0.7	-0.9	-0.9		-0.3	-0.8	-1.0	-1.1	-2.5
1680		-1.4	-0.6	-0.7	-0.9	-0.9		-0.3	-0.7	-1.0	-1.2	-2.6
1685		-1.7	-0.6	-0.6	-0.9	-0.9		-0.3	-0.7	-1.1	-1.2	-2.7
1690		-1.8	-0.6	-0.5	-0.9	-0.9		-0.2	-0.7	-1.1	-1.2	-2.8
1695		-1.8	-0.7	-0.5	-0.9	-0.8		-0.2	-0.8	-1.1	-1.2	-2.8
1700		-1.7	-0.9	-0.6	-0.8	-0.8		-0.1	-0.8	-1.1	-1.1	-2.9
1705		-1.5	-1.1	-0.5	-0.7	-0.7		-0.1	-0.7	-1.1	-1.1	-3.0
1710		-1.5	-1.2	-0.5	-0.7	-0.7		-0.1	-0.7	-1.0	-1.1	-3.1
1715		-1.5	-0.9	-0.5	-0.7	-0.7		-0.1	-0.7	-1.1	-1.1	-2.9
1720		-1.5	-0.7	-0.5	-0.7	-0.7		-0.2	-0.8	-1.2	-1.2	-2.8
1725		-1.7	-0.8	-0.4	-0.7	-0.8		-0.4	-0.9	-1.2	-1.1	-2.7
1730		-1.9	-0.9	-0.4	-0.7	-0.9		-0.6	-0.9	-1.1	-1.2	-2.6
1735		-2.0	-0.6	-0.5	-0.7	-0.9		-0.7	-1.0	-1.1	-1.2	-2.7
1740		-2.1	-0.5	-0.5	-0.8	-1.0		-0.7	-1.0	-1.1	-1.2	-2.8
1745		-2.2	-0.7	-0.4	-0.8	-0.9		-0.7	-1.1	-1.2	-1.3	-2.7
1750		-2.2	-0.8	-0.3	-0.8	-0.9		-0.8	-1.2	-1.3	-1.4	-2.7
1755		-2.2	-0.9	-0.4	-0.7	-1.2		-1.1	-1.2	-1.2	-1.3	-2.6
1760		-2.1	-0.9	-0.5	-0.7	-1.3		-1.3	-1.3	-1.1	-1.2	-2.4
1765		-1.5	-1.0	-0.6	-0.8	-1.1		-1.2	-1.3	-1.1	-1.2	-2.5
1770		-1.2	-1.0	-0.6	-0.9	-0.9		-1.0	-1.4	-1.2	-1.3	-2.5

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1775		-1.7	-1.1	-0.6	-0.9	-0.9		-1.0	-1.5	-1.3	-1.5	-2.3
1780		-2.2	-1.1	-0.5	-0.9	-0.9		-1.1	-1.5	-1.4	-1.7	-2.2
1785		-2.3	-1.3	-0.4	-0.9	-1.0		-1.3	-1.4	-1.6	-1.7	-2.3
1790		-2.5	-1.4	-0.4	-0.9	-1.0		-1.4	-1.4	-1.7	-1.7	-2.3
1795		-2.7	-1.4	-0.5	-0.9	-0.9		-1.3	-1.6	-1.6	-1.7	-2.5
1800		-2.8	-1.3	-0.6	-0.8	-0.9		-1.3	-1.7	-1.5	-1.8	-2.6
1805		-2.5	-1.2	-0.6	-0.6	-0.9		-1.3	-1.7	-1.6	-1.8	-2.5
1810		-2.3	-1.0	-0.6	-0.5	-1.0		-1.3	-1.6	-1.7	-1.8	-2.6
1815		-2.1	-0.9	-0.6	-0.5	-1.0		-1.3	-1.7	-1.8	-1.7	-2.6
1820		-2.0	-0.7	-0.7	-0.4	-1.0		-1.3	-1.7	-1.8	-1.6	-2.6
1825		-1.9	-0.8	-0.6	-0.4	-1.0		-1.3	-1.6	-1.8	-1.6	-2.4
1830		-1.7	-0.9	-0.6	-0.5	-1.0		-1.2	-1.5	-1.8	-1.7	-2.3
1835		-1.4	-0.8	-0.6	-0.7	-0.9		-1.1	-1.4	-1.7	-1.7	-2.6
1840		-1.2	-0.8	-0.6	-0.8	-0.9		-1.1	-1.3	-1.7	-1.8	-2.7
1845		-1.4	-0.8	-0.5	-0.6	-1.0		-1.2	-1.4	-1.7	-1.6	-2.7
1850		-1.6	-0.9	-0.4	-0.4	-1.1		-1.3	-1.3	-1.7	-1.4	-2.6
1855		-1.8	-0.8	-0.3	-0.4	-1.1		-1.2	-1.1	-1.5	-1.5	-2.7
1860		-2.0	-0.7	-0.3	-0.5	-1.0		-1.1	-1.0	-1.4	-1.6	-2.7
1865		-2.1	-0.6	-0.3	-0.7	-0.8		-0.8	-1.0	-1.4	-1.4	-2.7
1870		-2.3	-0.6	-0.4	-0.8	-0.6		-0.6	-1.0	-1.3	-1.3	-2.7
1875		-2.6	-0.6	-0.4	-0.6	-0.6		-0.6	-1.0	-1.3	-1.1	-2.8
1880		-2.8	-0.7	-0.4	-0.5	-0.7		-0.6	-0.9	-1.2	-1.0	-2.9
1885		-2.6	-0.7	-0.5	-0.3	-0.8		-0.7	-0.9	-1.2	-1.0	-2.7
1890		-2.4	-0.7	-0.5	-0.3	-0.9		-0.8	-0.7	-1.1	-1.0	-2.6
1895		-2.7	-0.6	-0.4	-0.4	-0.9		-0.7	-0.5	-1.3	-1.2	-2.4
1900		-2.9	-0.5	-0.3	-0.5	-0.8		-0.7	-0.3	-1.3	-1.3	-2.3
1905		-2.7	-0.6	-0.3	-0.3	-0.8		-0.6	-0.3	-1.4	-1.2	-2.1
1910		-2.5	-0.7	-0.3	-0.3	-0.8		-0.6	-0.3	-1.4	-1.1	-2.3
1915		-2.4	-0.7	-0.3	-0.3	-0.7		-0.5	-0.4	-1.3	-1.2	-3.2
1920		-2.3	-0.8	-0.2	-0.4	-0.7		-0.5	-0.5	-1.1	-1.4	-2.9
1925		-2.2	-1.0	-0.1	-0.3	-0.9		-0.6	-0.6	-1.1	-1.8	-3.5
1930		-2.4	-1.1	-0.1	-0.2	-0.9		-0.7	-0.7	-1.0	-2.2	-2.8
1935		-2.6	-1.3	-0.1	-0.1	-0.9		-0.7	-0.9	-1.0	-2.2	-2.5
1940		-2.5	-1.2	-0.2	0.0	-0.9		-0.7	-0.9	-0.9	-2.3	-2.5
1945		-1.5	-1.1	-0.3	-0.1	-0.8		-0.6	-0.9	-0.9	-2.2	-2.7
1950		-1.2	-0.9	-0.3	-0.2	-0.7		-0.4	-0.9	-0.9	-2.2	-2.7
1955		-1.1	-0.9	-0.2	-0.2	-0.5		-0.3	-1.0	-0.9	-2.5	-2.9
1960		-0.9	-0.6	-0.2	-0.3	-0.4		-0.2	-1.1	-1.0	-2.6	-4.0
1965		-0.9	-0.4	-0.3	-0.3	-0.5		-0.2	-0.8	-1.1	-2.7	-4.5

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75	3.75	7.50	11.25	15.00	18.75
1970		-1.0	-0.6	-0.1	-0.4	-0.5	-0.2	-0.6	-1.2	-2.6	-4.8
1975		-1.1	-0.7	0.0	-0.3	-0.5	-0.2	-0.7	-1.0	-2.2	-3.9
1980		-1.1	-0.7	0.1	-0.3	-0.5	-0.3	-0.9	-1.0	-1.9	-3.0
1985		-1.2	-0.7	-0.1	-0.5	-0.5	-0.2	-0.9	-1.1	-1.6	-3.2
1990		-1.3	-0.7	-0.3	-0.6	-0.6	-0.3	-0.9	-1.1	-1.5	-3.2
1995		-1.6	-0.7	-0.4	-0.5	-0.8	-0.5	-0.9	-1.1	-1.4	-3.1
2000		-2.0	-0.8	-0.5	-0.5	-1.0	-0.7	-1.0	-1.1	-1.4	-3.0
2005		-2.4	-1.0	-0.5	-0.6	-0.9	-0.7	-1.1	-1.3	-1.4	-3.0
2010		-2.8	-1.1	-0.4	-0.8	-0.8	-0.7	-1.1	-1.4	-1.5	-3.0
2015		-2.5	-1.2	-0.6	-0.8	-0.8	-0.6	-1.1	-1.5	-1.5	-2.9
2020		-2.2	-1.2	-0.7	-0.8	-0.8	-0.5	-1.1	-1.5	-1.5	-2.7
2025		-2.0	-1.0	-0.8	-1.0	-1.0	-0.6	-0.9	-1.4	-1.3	-2.6
2030		-1.9	-1.0	-1.0	-1.1	-1.2	-0.7	-0.7	-1.3	-1.2	-2.5
2035		-2.3	-1.1	-1.1	-1.2	-1.1	-0.5	-0.6	-1.3	-1.2	-2.4
2040		-2.6	-1.3	-1.2	-1.3	-1.1	-0.5	-0.5	-1.2	-1.2	-2.3
2045		-2.1	-1.4	-1.2	-1.3	-1.1	-0.5	-0.4	-1.1	-1.1	-2.1
2050		-1.8	-1.5	-1.2	-1.4	-1.2	-0.6	-0.4	-1.0	-1.1	-2.1
2055		-2.2	-1.3	-1.1	-1.5	-1.2	-0.7	-0.4	-0.7	-1.1	-2.2
2060		-2.4	-1.2	-1.0	-1.5	-1.2	-0.7	-0.5	-0.5	-1.1	-2.0
2065		-2.2	-1.1	-1.2	-1.4	-1.2	-0.6	-0.6	-0.6	-1.0	-1.3
2070		-2.0	-1.0	-1.3	-1.3	-1.2	-0.6	-0.7	-0.6	-0.8	-0.5
2075		-1.7	-1.1	-1.3	-1.3	-1.2	-0.6	-0.7	-0.6	-0.5	0.0
2080		-1.6	-1.1	-1.2	-1.3	-1.2	-0.6	-0.6	-0.5	-0.3	0.3
2085		-1.8	-1.1	-1.1	-1.2	-1.1	-0.4	-0.5	-0.4	-0.3	0.2
2090		-1.8	-1.2	-1.1	-1.2	-1.0	-0.2	-0.5	-0.2	-0.3	0.0
2095		-1.5	-1.1	-1.1	-1.2	-1.0	-0.2	-0.6	-0.6	-0.8	-0.6
2100		-1.4	-1.1	-1.1	-1.3	-1.0	-0.1	-0.8	-1.0	-1.1	-0.9
2105		-1.6	-1.2	-1.1	-1.2	-1.0	-0.1	-0.8	-0.9	-1.1	-1.5
2110		-1.8	-1.3	-1.0	-1.2	-1.0	-0.1	-0.8	-0.9	-1.1	-0.9
2115		-2.1	-1.3	-1.0	-1.4	-1.0	0.0	-0.8	-0.9	-1.0	-0.6
2120		-2.3	-1.3	-1.0	-1.5	-1.0	0.0	-0.8	-1.0	-1.0	-0.4
2125		-2.1	-1.3	-1.1	-1.4	-1.1	-0.1	-0.9	-0.9	-1.0	-0.4
2130		-1.9	-1.3	-1.1	-1.4	-1.3	-0.2	-0.9	-0.9	-0.9	-0.5
2135		-1.9	-1.4	-1.2	-1.4	-1.3	-0.2	-0.8	-0.9	-0.9	-0.7
2140		-2.1	-1.4	-1.3	-1.4	-1.4	-0.2	-0.8	-0.8	-1.1	-1.1
2145		-2.3	-1.4	-1.4	-1.4	-1.3	-0.1	-0.8	-0.9	-1.0	-1.2
2150		-2.4	-1.4	-1.5	-1.5	-1.3	0.0	-0.7	-0.9	-1.0	-1.3
2155		-2.4	-1.3	-1.4	-1.5	-1.3	0.0	-0.7	-0.9	-1.1	-1.4
2160		-2.4	-1.3	-1.3	-1.6	-1.3	-0.1	-0.7	-0.9	-1.1	-2.1

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2165		-2.5	-1.4	-1.4	-1.6	-1.4		-0.3	-0.7	-0.9	-1.2	-2.3
2170		-2.4	-1.5	-1.5	-1.5	-1.5		-0.3	-0.6	-0.9	-1.1	-1.7
2175		-2.5	-1.6	-1.5	-1.5	-1.6		-0.5	-0.6	-0.9	-0.9	-2.4
2180		-2.5	-1.7	-1.6	-1.4	-1.6		-0.6	-0.5	-0.8	-0.9	-2.9
2185		-2.4	-1.4	-1.6	-1.5	-1.4		-0.4	-0.7	-0.7	-0.9	-2.4
2190		-2.2	-1.1	-1.6	-1.5	-1.3		-0.3	-0.8	-0.6	-0.8	-2.0
2195		-2.0	-1.2	-1.5	-1.5	-1.4		-0.5	-0.7	-0.5	-0.5	-2.2
2200		-1.9	-1.2	-1.4	-1.5	-1.5		-0.6	-0.5	-0.5	-0.5	-2.3
2205		-2.3	-1.1	-1.4	-1.4	-1.3		-0.5	-0.4	-0.6	-0.7	-2.1
2210		-2.6	-1.1	-1.4	-1.3	-1.2		-0.4	-0.4	-0.6	-0.8	-2.0
2215		-2.8	-1.3	-1.3	-1.2	-1.2		-0.4	-0.4	-0.7	-0.7	-2.2
2220		-2.9	-1.5	-1.3	-1.1	-1.1		-0.5	-0.5	-0.7	-0.7	-2.3
2225		-2.6	-1.4	-1.2	-1.2	-1.2		-0.6	-0.5	-0.7	-0.8	-2.3
2230		-2.4	-1.2	-1.1	-1.2	-1.2		-0.7	-0.5	-0.7	-1.0	-2.2
2235		-2.5	-1.2	-1.1	-1.1	-1.1		-0.7	-0.5	-0.7	-1.0	-2.3
2240		-2.4	-1.1	-1.1	-1.1	-1.0		-0.6	-0.6	-0.9	-1.1	-2.3
2245		-1.9	-1.0	-1.1	-1.1	-0.9		-0.7	-0.9	-0.9	-1.1	-2.5
2250		-1.8	-1.0	-1.1	-1.1	-0.9		-0.7	-1.0	-1.0	-1.1	-2.6
2255		-2.3	-0.9	-1.1	-1.1	-0.9		-0.8	-1.0	-1.1	-1.3	-2.5
2260		-2.6	-0.9	-1.0	-1.1	-0.8		-0.9	-1.0	-1.2	-1.4	-2.4
2265		-2.4	-0.9	-1.0	-1.0	-0.8		-0.9	-1.1	-1.2	-1.5	-2.3
2270		-2.1	-1.0	-1.0	-1.0	-0.8		-1.0	-1.2	-1.3	-1.5	-2.2
2275		-2.0	-1.1	-1.0	-1.0	-0.9		-1.1	-1.3	-1.3	-1.5	-2.4
2280		-1.9	-1.1	-0.9	-1.0	-0.8		-1.1	-1.4	-1.4	-1.5	-2.5
2285		-2.0	-0.9	-0.9	-0.9	-0.9		-1.2	-1.3	-1.5	-1.8	-2.6
2290		-2.0	-0.7	-0.8	-0.9	-0.8		-1.2	-1.3	-1.7	-1.8	-2.5
2295		-1.7	-0.7	-0.9	-0.9	-0.7		-1.1	-1.4	-1.7	-1.8	-2.5
2300		-1.4	-0.7	-0.9	-0.9	-0.6		-1.1	-1.5	-1.8	-1.8	-2.5
2305		-1.4	-0.8	-0.9	-0.8	-0.7		-1.1	-1.5	-1.8	-1.9	-2.4
2310		-1.5	-0.7	-0.9	-0.7	-0.7		-1.1	-1.6	-1.8	-2.1	-2.5
2315		-1.7	-0.5	-0.8	-0.7	-0.6		-1.0	-1.6	-1.8	-1.9	-2.7
2320		-1.9	-0.4	-0.8	-0.6	-0.6		-1.0	-1.5	-1.8	-1.8	-2.8
2325		-1.9	-0.5	-0.7	-0.6	-0.6		-0.9	-1.5	-1.8	-1.8	-3.0
2330		-2.0	-0.5	-0.6	-0.6	-0.5		-0.8	-1.5	-1.7	-1.8	-3.0
2335		-2.3	-0.7	-0.6	-0.6	-0.5		-0.7	-1.5	-1.7	-1.7	-2.9
2340		-2.5	-0.9	-0.6	-0.7	-0.4		-0.7	-1.4	-1.8	-1.6	-2.7
2345		-2.6	-0.9	-0.6	-0.6	-0.5		-0.7	-1.3	-1.8	-1.6	-2.6
2350		-2.6	-0.8	-0.6	-0.6	-0.6		-0.8	-1.2	-1.8	-1.6	-2.5
2355		-2.4	-0.8	-0.6	-0.6	-0.5		-0.7	-1.3	-1.8	-1.5	-2.4

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2360		-2.3	-0.8	-0.6	-0.5	-0.6		-0.7	-1.3	-1.8	-1.5	-2.4
2365		-2.2	-0.8	-0.6	-0.5	-0.6		-0.8	-1.3	-1.8	-1.5	-2.6
2370		-2.2	-0.8	-0.5	-0.5	-0.7		-0.9	-1.3	-1.8	-1.5	-2.7
2375		-2.5	-0.9	-0.5	-0.5	-0.6		-0.7	-1.4	-1.7	-1.6	-2.7
2380		-2.7	-0.9	-0.4	-0.5	-0.5		-0.6	-1.5	-1.7	-1.7	-2.8
2385		-2.5	-0.7	-0.4	-0.5	-0.4		-0.5	-1.5	-1.8	-1.6	-2.8
2390		-2.3	-0.6	-0.4	-0.5	-0.4		-0.5	-1.5	-1.8	-1.5	-2.9
2395		-2.1	-0.5	-0.4	-0.5	-0.4		-0.5	-1.4	-1.9	-1.7	-2.6
2400		-1.9	-0.5	-0.4	-0.5	-0.5		-0.6	-1.4	-1.9	-1.8	-2.5
2405		-1.6	-0.6	-0.4	-0.5	-0.4		-0.5	-1.4	-1.8	-1.8	-2.7
2410		-1.4	-0.7	-0.4	-0.5	-0.5		-0.5	-1.5	-1.8	-1.9	-2.9
2415		-1.7	-0.6	-0.4	-0.5	-0.5		-0.5	-1.4	-1.8	-1.8	-3.0
2420		-1.9	-0.6	-0.3	-0.5	-0.5		-0.5	-1.5	-1.8	-1.8	-3.0
2425		-1.7	-0.6	-0.3	-0.5	-0.4		-0.4	-1.6	-1.9	-1.7	-2.9
2430		-1.6	-0.5	-0.4	-0.5	-0.3		-0.4	-1.8	-1.9	-1.7	-2.8
2435		-1.6	-0.6	-0.4	-0.5	-0.2		-0.3	-1.9	-2.0	-1.7	-2.7
2440		-1.5	-0.6	-0.5	-0.5	-0.2		-0.3	-1.9	-2.1	-1.7	-2.6
2445		-1.3	-0.6	-0.4	-0.5	-0.3		-0.5	-1.9	-2.1	-1.7	-2.6
2450		-1.2	-0.5	-0.4	-0.5	-0.3		-0.5	-1.8	-2.0	-1.7	-2.7
2455		-1.7	-0.5	-0.4	-0.5	-0.3		-0.5	-1.8	-2.1	-1.7	-2.7
2460		-1.9	-0.5	-0.3	-0.5	-0.2		-0.5	-1.7	-2.1	-1.7	-2.8
2465		-1.6	-0.3	-0.4	-0.6	-0.3		-0.5	-1.6	-1.9	-1.9	-2.9
2470		-1.2	-0.4	-0.4	-0.6	-0.4		-0.6	-1.4	-1.7	-2.0	-2.9
2475		-0.7	-0.9	-0.5	-0.6	-0.6		-0.8	-1.6	-1.6	-1.8	-2.6
2480		-0.5	-1.2	-0.6	-0.6	-0.7		-0.9	-1.7	-1.5	-1.7	-2.3
2485		-0.8	-0.9	-0.7	-0.6	-0.6		-0.8	-1.5	-1.4	-1.8	-2.3
2490		-0.9	-0.8	-0.7	-0.7	-0.7		-0.8	-1.5	-1.3	-1.8	-2.3
2495		-1.1	-0.9	-0.7	-0.7	-0.8		-1.0	-1.3	-1.5	-1.7	-2.4
2500		-1.3	-1.0	-0.7	-0.7	-1.0		-1.2	-1.2	-1.6	-1.7	-2.6
2505		-1.3	-1.1	-0.7	-0.8	-1.0		-1.3	-1.2	-1.5	-1.5	-2.6
2510		-1.2	-1.1	-0.9	-0.8	-1.1		-1.3	-1.2	-1.4	-1.3	-2.6
2515		-0.9	-1.0	-0.9	-0.9	-1.1		-1.3	-1.3	-1.3	-1.3	-2.9
2520		-0.8	-1.0	-1.0	-0.9	-1.1		-1.3	-1.3	-1.3	-1.3	-2.9
2525		-1.2	-1.0	-1.0	-0.8	-1.2		-1.4	-1.4	-1.2	-1.4	-2.7
2530		-1.4	-1.0	-1.1	-0.7	-1.3		-1.5	-1.5	-1.2	-1.5	-2.6
2535		-1.2	-1.2	-1.0	-0.8	-1.3		-1.5	-1.3	-1.4	-1.5	-2.5
2540		-1.0	-1.3	-1.0	-0.9	-1.3		-1.4	-1.1	-1.4	-1.5	-2.5
2545		-0.9	-1.1	-1.2	-1.0	-1.3		-1.4	-1.0	-1.1	-1.5	-2.3
2550		-0.8	-0.9	-1.3	-1.0	-1.2		-1.3	-1.0	-1.0	-1.5	-2.2

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2555		-0.8	-0.9	-1.0	-0.9	-1.2		-1.3	-1.3	-1.1	-1.4	-2.2
2560		-0.8	-1.0	-0.8	-0.8	-1.2		-1.3	-1.4	-1.2	-1.4	-2.3
2565		-1.0	-1.3	-0.7	-0.9	-1.2		-1.2	-1.3	-1.1	-1.4	-2.3
2570		-1.1	-1.5	-0.6	-0.9	-1.2		-1.2	-1.2	-1.0	-1.5	-2.4
2575		-1.4	-1.6	-0.6	-0.9	-1.1		-1.2	-1.1	-1.1	-1.5	-2.4
2580		-1.6	-1.6	-0.6	-0.9	-1.0		-1.1	-1.1	-1.3	-1.5	-2.4
2585		-1.8	-1.5	-0.6	-1.0	-0.8		-0.9	-1.4	-1.2	-1.5	-2.4
2590		-1.9	-1.5	-0.7	-1.1	-0.7		-0.8	-1.5	-1.1	-1.5	-2.4
2595		-1.9	-1.3	-0.7	-1.1	-0.8		-0.9	-1.5	-1.0	-1.6	-2.4
2600		-1.7	-1.2	-0.7	-1.2	-0.8		-0.9	-1.4	-0.9	-1.7	-2.4
2605		-1.5	-1.1	-0.6	-1.2	-0.9		-1.0	-1.4	-0.9	-1.8	-2.3
2610		-1.5	-1.0	-0.6	-1.1	-1.0		-1.0	-1.3	-1.0	-1.8	-2.3
2615		-2.1	-1.2	-0.5	-1.0	-1.3		-1.3	-1.0	-1.0	-1.8	-2.4
2620		-2.5	-1.3	-0.4	-0.9	-1.4		-1.5	-1.0	-1.1	-1.8	-2.4
2625		-2.2	-1.2	-0.4	-0.9	-1.4		-1.4	-1.1	-1.1	-1.6	-2.4
2630		-1.9	-1.2	-0.5	-0.9	-1.3		-1.4	-1.1	-1.0	-1.5	-2.4
2635		-1.3	-1.3	-0.6	-0.8	-1.1		-1.1	-1.3	-1.0	-1.5	-2.5
2640		-1.1	-1.4	-0.7	-0.8	-0.9		-1.0	-1.4	-0.9	-1.5	-2.5
2645		-1.4	-1.4	-0.9	-0.9	-0.9		-0.9	-1.3	-0.9	-1.5	-2.5
2650		-1.6	-1.5	-1.0	-1.0	-0.8		-0.9	-1.2	-0.8	-1.5	-2.5
2655		-1.9	-1.7	-1.0	-1.0	-0.8		-0.9	-1.3	-0.8	-1.4	-2.5
2660		-2.0	-1.8	-0.9	-1.0	-0.8		-0.9	-1.3	-0.8	-1.4	-2.5
2665		-1.6	-1.8	-0.9	-1.0	-0.8		-0.9	-1.2	-0.9	-1.3	-2.6
2670		-1.4	-1.9	-0.9	-0.9	-0.9		-1.0	-1.1	-1.0	-1.3	-2.7
2675		-1.7	-1.7	-1.0	-0.7	-0.9		-1.1	-1.2	-1.1	-1.5	-2.4
2680		-1.6	-1.7	-1.1	-0.6	-1.0		-1.1	-1.3	-1.2	-1.7	-2.2
2685		-1.3	-1.6	-1.0	-0.6	-1.0		-1.2	-1.3	-1.1	-1.8	-2.1
2690		-1.0	-1.6	-1.1	-0.6	-1.1		-1.3	-1.3	-1.0	-1.8	-2.0
2695		-1.3	-1.5	-1.3	-0.6	-1.2		-1.4	-1.2	-1.0	-1.6	-2.3
2700		-1.6	-1.5	-1.4	-0.6	-1.3		-1.4	-1.2	-0.9	-1.4	-2.5
2705		-1.8	-1.4	-1.4	-0.7	-1.3		-1.4	-1.1	-1.0	-1.4	-2.5
2710		-1.9	-1.1	-1.4	-0.7	-1.4		-1.4	-0.9	-1.0	-1.3	-2.8
2715	-1.6	-2.0	-1.1	-1.0	-0.7	-1.5		-1.4	-0.8	-1.0	-1.3	-2.7
2720	-1.4	-1.5	-1.1	-0.8	-0.7	-1.5		-1.4	-0.7	-1.0	-1.3	-2.7
2725	-1.9	-1.1	-1.2	-0.8	-0.7	-1.4		-1.4	-0.7	-0.9	-1.2	-2.5
2730	-1.6	-1.1	-1.3	-0.7	-0.8	-1.3		-1.3	-0.9	-1.0	-1.3	-2.3
2735	-1.7	-1.1	-1.4	-0.6	-0.9	-1.2		-1.3	-1.1	-1.1	-1.3	-2.3
2740	-3.0	-1.0	-1.5	-0.5	-1.0	-1.1		-1.2	-1.2	-1.1	-1.3	-2.3
2745	-2.2	-1.0	-1.4	-0.6	-1.2	-0.8		-0.9	-1.3	-1.0	-1.3	-2.5

EXISTING CROSSFALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2750	-1.4	-0.9	-1.3	-0.6	-1.3	-0.6		-0.7	-1.4	-0.9	-1.3	-2.7
2755	-1.2	-0.9	-1.3	-0.6	-1.2	-0.8		-0.9	-1.4	-0.7	-1.4	-2.7
2760	-1.0	-0.8	-1.3	-0.6	-1.1	-1.0		-1.1	-1.4	-0.7	-1.5	-2.6
2765	-0.9	-0.7	-1.4	-0.8	-1.0	-0.9		-1.0	-1.3	-0.9	-1.4	-2.4
2770	-0.9	-0.7	-1.5	-0.9	-1.0	-0.9		-1.0	-1.2	-1.0	-1.4	-2.3
2775	-1.0	-1.0	-1.2	-0.8	-1.1	-1.1		-1.2	-1.0	-1.0	-1.5	-2.4
2780	-1.3	-1.1	-0.9	-0.7	-1.2	-1.2		-1.3	-0.7	-1.0	-1.6	-2.3
2785	-1.8	-1.0	-1.0	-0.7	-1.0	-1.1		-1.2	-0.7	-1.1	-1.4	-1.7

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
800	-1.4	-1.6	-1.0	-1.0	-1.1	-1.0		0.9	0.4	0.7	0.6	-0.2
805	-2.1	-1.4	-1.1	-1.1	-1.1	-1.1		0.9	0.4	0.7	0.6	0.1
810	-1.8	-1.7	-1.1	-1.2	-1.1	-1.2		0.9	0.5	0.7	0.6	-0.1
815	-1.7	-1.9	-1.1	-1.2	-1.2	-1.2		0.8	0.5	0.7	0.6	-0.2
820	-1.6	-2.1	-1.2	-1.2	-1.3	-1.2		0.8	0.5	0.7	0.6	-0.4
825	-1.5	-2.2	-1.3	-1.3	-1.3	-1.2		0.7	0.6	0.7	0.6	-0.4
830	-1.5	-2.4	-1.3	-1.3	-1.3	-1.2		0.7	0.6	0.7	0.6	-0.3
835	-1.7	-2.5	-1.3	-1.3	-1.3	-1.3		0.7	0.6	0.7	0.6	-0.5
840	-1.7	-2.6	-1.3	-1.3	-1.3	-1.2		0.7	0.6	0.7	0.6	-0.5
845	-1.7	-2.4	-1.2	-1.3	-1.2	-1.2		0.7	0.7	0.7	0.7	-0.7
850	-1.6	-2.2	-1.2	-1.2	-1.2	-1.2		0.8	0.8	0.8	0.7	-0.9
855	-1.7	-2.3	-1.2	-1.2	-1.2	-1.2		0.9	0.9	0.9	0.8	-0.9
860	-1.7	-2.3	-1.2	-1.1	-1.2	-1.2		0.9	1.0	0.9	0.9	-1.0
865	-1.2	-2.5	-1.1	-1.1	-1.1	-1.1		1.0	1.0	1.0	0.9	-0.9
870	-1.4	-2.6	-1.1	-1.1	-1.1	-1.1		1.0	1.0	1.1	0.9	-1.0
875	-1.4	-2.7	-1.1	-1.1	-1.1	-1.1		1.1	1.1	1.1	1.0	-1.4
880	-2.0	-2.7	-1.1	-1.1	-1.1	-1.1		1.1	1.2	1.1	1.0	-2.2
885	-2.7	-2.5	-1.0	-1.1	-1.1	-1.1		1.2	1.2	1.2	1.1	-2.3
890		-2.5	-1.0	-1.0	-1.0	-1.0		1.3	1.3	1.3	1.1	-2.5
895		-2.5	-1.0	-1.0	-1.0	-1.0		1.3	1.3	1.3	1.2	-2.5
900		-2.5	-1.1	-1.0	-1.0	-1.0		1.3	1.3	1.3	1.2	-2.5
905		-2.5	-1.0	-1.0	-1.0	-1.0		1.4	1.3	1.3	1.2	-2.5
910		-2.5	-1.0	-1.0	-1.0	-1.0		1.4	1.3	1.3	1.2	-2.5
915		-2.5	-1.0	-1.0	-1.0	-1.0		1.4	1.4	1.3	1.1	-2.5
920		-2.5	-1.0	-1.0	-1.0	-1.0		1.4	1.4	1.2	1.1	-2.5
925		-2.5	-1.0	-1.0	-1.0	-1.0		1.4	1.4	1.2	1.1	-2.5
930		-2.5	-1.0	-1.0	-1.0	-1.0		1.3	1.4	1.2	1.1	-2.5
935		-2.5	-1.0	-1.0	-1.0	-1.1		1.3	1.3	1.2	1.1	-2.5
940		-2.5	-1.0	-1.0	-1.1	-1.0		1.3	1.3	1.3	1.1	-2.5
945		-2.5	-1.1	-1.0	-1.1	-1.0		1.3	1.3	1.3	1.1	-2.5
950		-2.5	-1.1	-1.1	-1.1	-1.1		1.3	1.3	1.2	1.1	-2.5
955		-2.5	-1.1	-1.1	-1.1	-1.1		1.3	1.2	1.2	1.1	-2.5
960		-2.5	-1.1	-1.1	-1.1	-1.1		1.3	1.2	1.2	1.1	-2.5
965		-2.5	-1.1	-1.1	-1.1	-1.1		1.2	1.2	1.1	1.1	-2.5
970		-2.5	-1.1	-1.1	-1.1	-1.1		1.1	1.1	1.1	1.0	-2.5
975		-2.5	-1.1	-1.1	-1.1	-1.1		1.1	1.1	1.1	1.0	-2.5
980		-2.5	-1.1	-1.1	-1.0	-1.0		1.1	1.0	1.1	1.0	-2.5
985		-2.5	-1.0	-1.0	-1.0	-1.0		1.0	1.0	1.0	0.9	-2.5
990		-2.5	-1.0	-1.0	-1.0	-1.0		1.0	1.0	1.0	0.8	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
995		-2.5	-1.0	-1.1	-1.0	-1.0		1.0	0.9	0.9	0.7	-2.5
1000		-2.5	-1.0	-1.0	-1.0	-1.0		1.0	0.9	0.9	0.6	-2.5
1005		-2.5	-1.0	-1.0	-1.0	-1.0		0.9	0.9	0.8	0.5	-2.5
1010		-2.5	-1.0	-1.0	-1.0	-1.0		0.9	0.8	0.7	0.4	-2.5
1015		-2.5	-1.0	-1.0	-1.0	-1.0		0.9	0.8	0.7	0.4	-2.5
1020		-2.5	-1.0	-1.0	-1.0	-1.0		0.9	0.7	0.6	0.3	-2.5
1025		-2.5	-1.0	-1.0	-1.0	-0.9		0.9	0.7	0.5	0.3	-2.5
1030		-2.5	-1.0	-1.0	-1.0	-1.0		0.8	0.6	0.5	0.2	-2.5
1035		-2.5	-1.0	-1.0	-1.0	-1.0		0.7	0.5	0.4	0.2	-2.5
1040		-2.5	-1.0	-1.0	-1.0	-1.0		0.6	0.4	0.3	0.1	-2.5
1045		-2.5	-1.0	-1.0	-1.0	-1.0		0.6	0.3	0.2	0.0	-2.5
1050		-2.4	-1.0	-1.0	-1.0	-1.0		0.5	0.2	0.1	0.0	-2.5
1055		-2.4	-1.0	-1.0	-1.0	-1.0		0.3	0.1	0.1	-0.1	-2.5
1060		-2.3	-1.0	-1.0	-1.0	-1.0		0.2	0.1	-0.1	-0.2	-2.5
1065		-2.1	-1.0	-1.0	-1.0	-1.0		0.2	-0.1	-0.1	-0.3	-2.5
1070		-1.7	-1.0	-1.0	-1.0	-1.0		0.0	-0.1	-0.2	-0.4	-2.5
1075		-1.9	-1.0	-1.0	-1.0	-1.0		-0.1	-0.2	-0.3	-0.5	-2.5
1080		-2.0	-1.0	-1.0	-1.0	-1.0		-0.1	-0.3	-0.4	-0.5	-2.5
1085		-2.1	-1.1	-1.1	-1.1	-1.1		-0.3	-0.4	-0.5	-0.6	-2.5
1090		-2.3	-1.1	-1.1	-1.1	-1.1		-0.4	-0.5	-0.6	-0.7	-2.5
1095		-2.5	-1.2	-1.2	-1.2	-1.2		-0.5	-0.6	-0.7	-0.8	-2.5
1100		-2.5	-1.3	-1.3	-1.3	-1.3		-0.6	-0.7	-0.8	-0.9	-2.5
1105		-2.5	-1.3	-1.3	-1.3	-1.3		-0.6	-0.8	-0.8	-1.0	-2.5
1110		-2.5	-1.4	-1.4	-1.4	-1.3		-0.7	-0.9	-0.9	-1.0	-2.5
1115		-2.5	-1.4	-1.4	-1.4	-1.3		-0.8	-0.9	-0.9	-1.0	-2.5
1120		-2.5	-1.4	-1.4	-1.4	-1.3		-0.9	-0.9	-1.0	-1.0	-2.5
1125		-2.5	-1.3	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.0	-2.5
1130		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1135		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1140		-2.4	-1.3	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1145		-2.0	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.1	-2.5
1150		-1.6	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1155		-1.9	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1160		-2.2	-1.1	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1165		-2.2	-1.1	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1170		-2.2	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1175		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.1	-2.5
1180		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1185		-2.4	-1.1	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1190		-2.5	-1.1	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1195		-2.5	-1.0	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1200		-2.5	-1.0	-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1205		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1210		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1215		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.1	-2.5
1220		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.1	-2.5
1225		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1230		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.1	-2.5
1235		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.1	-2.5
1240		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1245		-2.4	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1250		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1255		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1260		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1265		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1270		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1275		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1280		-2.5	-1.0	-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1285		-2.5	-1.1	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1290		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.1	-2.5
1295		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1300		-2.4	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1305		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1310		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.1	-2.5
1315		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.1	-2.5
1320		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1325		-2.5	-1.1	-1.2	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1330		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1335		-2.5	-1.2	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1340		-2.5	-1.2	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1345		-2.5	-1.2	-1.2	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1350		-2.5	-1.3	-1.2	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1355		-2.5	-1.2	-1.3	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1360		-2.5	-1.2	-1.3	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1365		-2.5	-1.3	-1.2	-1.3	-1.2		-1.0	-1.0	-1.0	-1.1	-2.5
1370		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.1	-2.5
1375		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1380		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.1	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1385		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1390		-2.5	-1.3	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.0	-2.5
1395		-2.5	-1.3	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.0	-2.5
1400		-2.5	-1.4	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.0	-2.5
1405		-2.5	-1.3	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.1	-2.5
1410		-2.5	-1.3	-1.3	-1.3	-1.3		-1.0	-1.0	-1.0	-1.0	-2.5
1415		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1420		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1425		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1430		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1435		-2.5	-1.2	-1.2	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1440		-2.5	-1.2	-1.2	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1445		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1450		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1455		-2.5	-1.2	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1460		-2.5	-1.2	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1465		-2.5	-1.3	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1470		-2.5	-1.3	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1475		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1480		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1485		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1490		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1495		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1500		-2.5	-1.2	-1.2	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1505		-2.5	-1.2	-1.2	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1510		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1515		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1520		-2.4	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1525		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1530		-2.5	-1.1	-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1535		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1540		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1545		-2.4	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1550		-2.4	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1555		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1560		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1565		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1570		-2.5	-1.1	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
1575		-2.5	-1.1	-1.0	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1580		-2.5	-1.1	-1.0	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1585		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1590		-2.5	-1.1	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1595		-2.5	-1.1	-1.1	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1600		-2.5	-1.2	-1.1	-1.2	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
1605		-2.5	-1.2	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.5
1610		-2.5	-1.2	-1.2	-1.2	-1.2		-0.9	-1.0	-1.0	-1.0	-2.5
1615		-2.5	-1.2	-1.2	-1.2	-1.1		-0.9	-0.9	-0.9	-1.0	-2.5
1620		-2.5	-1.2	-1.1	-1.2	-1.1		-0.9	-0.9	-0.9	-0.9	-2.5
1625		-2.5	-1.1	-1.1	-1.2	-1.1		-0.9	-0.9	-0.8	-0.9	-2.5
1630		-2.5	-1.1	-1.1	-1.1	-1.1		-0.8	-0.8	-0.8	-0.9	-2.5
1635		-2.5	-1.1	-1.1	-1.1	-1.1		-0.7	-0.8	-0.8	-0.8	-2.5
1640		-2.5	-1.1	-1.1	-1.1	-1.1		-0.6	-0.7	-0.7	-0.8	-2.5
1645		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.7	-0.7	-0.7	-2.5
1650		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.6	-0.6	-0.7	-2.5
1655		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.6	-0.6	-0.6	-2.5
1660		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.6	-0.6	-2.5
1665		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1670		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1675		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1680		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1685		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.5	-2.5
1690		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.5	-2.5
1695		-2.5	-1.1	-1.1	-1.2	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1700		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1705		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.5	-2.5
1710		-2.5	-1.1	-1.1	-1.1	-1.1		-0.5	-0.5	-0.5	-0.6	-2.5
1715		-2.5	-1.1	-1.1	-1.1	-1.1		-0.6	-0.6	-0.6	-0.6	-2.5
1720		-2.5	-1.1	-1.1	-1.1	-1.1		-0.6	-0.6	-0.6	-0.7	-2.5
1725		-2.5	-1.1	-1.0	-1.1	-1.0		-0.7	-0.7	-0.7	-0.7	-2.5
1730		-2.5	-1.0	-1.0	-1.1	-1.0		-0.7	-0.7	-0.7	-0.8	-2.5
1735		-2.5	-1.0	-1.0	-1.1	-1.0		-0.8	-0.8	-0.8	-0.8	-2.5
1740		-2.5	-1.0	-1.0	-1.0	-1.0		-0.8	-0.8	-0.8	-0.9	-2.5
1745		-2.5	-1.0	-1.0	-1.0	-1.0		-0.9	-0.9	-0.9	-0.9	-2.5
1750		-2.5	-1.0	-1.0	-1.1	-1.0		-0.9	-0.9	-0.9	-1.0	-2.5
1755		-2.5	-1.0	-1.0	-1.0	-1.0		-0.9	-0.9	-1.0	-1.0	-2.5
1760		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
1765		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.1	-1.1	-2.5
1770		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.1	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1775		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.2	-1.2	-2.5
1780		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.2	-1.3	-1.3	-2.5
1785		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.4	-2.5
1790		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.4	-2.5
1795		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.3	-1.4	-1.4	-2.5
1800		-2.5	-1.0	-1.0	-1.1	-1.0		-1.4	-1.4	-1.4	-1.4	-2.5
1805		-2.5	-1.0	-1.0	-1.1	-1.0		-1.3	-1.4	-1.4	-1.4	-2.5
1810		-2.5	-1.0	-1.0	-1.1	-1.0		-1.3	-1.4	-1.3	-1.4	-2.5
1815		-2.5	-1.0	-1.0	-1.1	-1.0		-1.3	-1.4	-1.3	-1.4	-2.5
1820		-2.5	-1.0	-1.1	-1.0	-1.0		-1.3	-1.3	-1.4	-1.4	-2.5
1825		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.3	-2.5
1830		-2.5	-1.0	-1.0	-1.1	-1.0		-1.3	-1.2	-1.3	-1.3	-2.5
1835		-2.5	-1.0	-1.0	-1.1	-1.0		-1.3	-1.3	-1.3	-1.3	-2.5
1840		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.2	-1.3	-1.3	-2.5
1845		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.3	-2.5
1850		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.1	-2.5
1855		-2.5	-1.0	-1.0	-1.0	-0.9		-1.0	-1.0	-1.0	-1.1	-2.5
1860		-2.5	-1.0	-0.9	-1.0	-0.9		-1.0	-1.0	-1.0	-1.0	-2.5
1865		-2.5	-0.9	-0.9	-1.0	-0.9		-0.9	-0.9	-0.9	-1.0	-2.5
1870		-2.5	-0.9	-0.9	-0.9	-0.8		-0.8	-0.9	-0.9	-0.9	-2.5
1875		-2.5	-0.9	-0.9	-0.9	-0.8		-0.8	-0.8	-0.8	-0.9	-2.5
1880		-2.5	-0.9	-0.9	-0.9	-0.8		-0.7	-0.8	-0.7	-0.8	-2.5
1885		-2.5	-0.9	-0.8	-0.8	-0.8		-0.7	-0.7	-0.7	-0.7	-2.5
1890		-2.5	-0.8	-0.8	-0.8	-0.8		-0.6	-0.7	-0.7	-0.7	-2.5
1895		-2.5	-0.8	-0.7	-0.8	-0.7		-0.6	-0.6	-0.6	-0.7	-2.5
1900		-2.5	-0.9	-0.7	-0.8	-0.7		-0.6	-0.6	-0.6	-0.7	-2.5
1905		-2.5	-0.9	-0.8	-0.8	-0.7		-0.6	-0.6	-0.6	-0.7	-2.5
1910		-2.5	-0.9	-0.7	-0.8	-0.7		-0.5	-0.6	-0.5	-0.7	-2.8
1915		-2.5	-0.9	-0.7	-0.7	-0.7		-0.5	-0.5	-0.5	-0.8	-3.7
1920		-2.5	-0.9	-0.7	-0.7	-0.7		-0.5	-0.6	-0.5	-1.0	-3.2
1925		-2.5	-1.1	-0.7	-0.7	-0.7		-0.5	-0.6	-0.5	-1.5	-3.0
1930		-2.5	-1.2	-0.7	-0.7	-0.7		-0.5	-0.5	-0.6	-1.9	-1.6
1935		-2.5	-1.4	-0.7	-0.7	-0.7		-0.5	-0.5	-0.5	-1.9	-1.4
1940		-2.5	-1.6	-0.7	-0.8	-0.7		-0.5	-0.5	-0.6	-2.0	-1.3
1945		-2.6	-2.0	-0.8	-0.8	-0.7		-0.5	-0.5	-0.5	-1.8	-1.5
1950		-2.9	-2.0	-0.8	-0.8	-0.8		-0.5	-0.5	-0.6	-1.7	-1.6
1955		-2.7	-2.0	-0.8	-0.8	-0.8		-0.5	-0.5	-0.6	-2.0	-1.5
1960		-2.7	-1.9	-0.8	-0.8	-0.8		-0.6	-0.6	-0.6	-2.2	-2.6
1965		-2.6	-1.8	-0.8	-0.8	-0.8		-0.5	-0.5	-0.6	-2.3	-3.1

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
1970		-2.5	-1.9	-0.8	-0.8	-0.8		-0.5	-0.5	-0.6	-2.2	-3.3
1975		-2.6	-1.7	-0.8	-0.8	-0.8		-0.5	-0.5	-0.6	-2.0	-2.8
1980		-2.8	-1.4	-0.7	-0.9	-0.8		-0.6	-0.6	-0.6	-1.6	-2.3
1985		-2.5	-1.0	-0.8	-1.0	-0.9		-0.6	-0.6	-0.7	-1.3	-2.5
1990		-2.5	-1.1	-0.9	-1.0	-1.0		-0.7	-0.7	-0.7	-1.2	-2.5
1995		-2.5	-1.1	-1.0	-1.0	-1.1		-0.8	-0.8	-0.8	-1.1	-2.5
2000		-2.5	-1.1	-1.1	-1.1	-1.1		-0.9	-0.9	-0.9	-1.0	-2.4
2005		-2.5	-1.1	-1.1	-1.1	-1.1		-0.9	-0.9	-0.9	-1.0	-2.4
2010		-2.5	-1.2	-1.1	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.4
2015		-2.5	-1.3	-1.2	-1.2	-1.2		-1.0	-1.0	-1.0	-1.0	-2.4
2020		-2.5	-1.3	-1.3	-1.3	-1.2		-1.0	-1.0	-1.0	-1.0	-2.3
2025		-2.5	-1.4	-1.3	-1.3	-1.3		-0.9	-1.0	-1.0	-1.0	-2.2
2030		-2.5	-1.4	-1.3	-1.4	-1.3		-0.8	-0.9	-0.9	-1.0	-2.1
2035		-2.5	-1.3	-1.3	-1.3	-1.3		-0.7	-0.9	-0.9	-1.0	-2.2
2040		-2.5	-1.4	-1.3	-1.3	-1.3		-0.7	-0.9	-0.9	-0.9	-2.3
2045		-2.5	-1.4	-1.3	-1.3	-1.3		-0.6	-0.9	-0.9	-0.9	-2.4
2050		-2.5	-1.3	-1.2	-1.3	-1.2		-0.6	-0.8	-0.8	-0.9	-2.4
2055		-2.5	-1.4	-1.2	-1.3	-1.2		-0.6	-0.7	-0.7	-0.9	-2.3
2060		-2.5	-1.4	-1.1	-1.2	-1.2		-0.6	-0.7	-0.7	-0.8	-1.8
2065		-2.5	-1.4	-1.1	-1.2	-1.2		-0.6	-0.6	-0.6	-0.8	-1.3
2070		-2.5	-1.3	-1.2	-1.3	-1.2		-0.6	-0.6	-0.6	-0.7	-0.7
2075		-2.5	-1.3	-1.2	-1.3	-1.2		-0.6	-0.6	-0.6	-0.4	-0.5
2080		-2.5	-1.3	-1.2	-1.3	-1.3		-0.6	-0.6	-0.5	-0.3	-0.2
2085		-2.5	-1.3	-1.3	-1.3	-1.3		-0.6	-0.4	-0.4	-0.2	-0.3
2090		-2.5	-1.3	-1.3	-1.3	-1.3		-0.6	-0.4	-0.3	-0.3	-0.3
2095		-2.5	-1.4	-1.3	-1.4	-1.4		-0.5	-0.5	-0.5	-0.5	-0.5
2100		-2.5	-1.4	-1.4	-1.4	-1.4		-0.5	-0.6	-0.7	-0.5	-0.6
2105		-2.5	-1.4	-1.4	-1.4	-1.4		-0.5	-0.6	-0.6	-0.6	-1.2
2110		-2.5	-1.5	-1.4	-1.5	-1.4		-0.5	-0.5	-0.5	-0.5	-0.9
2115		-2.5	-1.5	-1.5	-1.5	-1.4		-0.5	-0.5	-0.5	-0.5	-0.7
2120		-2.5	-1.6	-1.5	-1.5	-1.5		-0.5	-0.5	-0.5	-0.5	-0.5
2125		-2.5	-1.6	-1.6	-1.6	-1.5		-0.5	-0.5	-0.5	-0.5	-0.4
2130		-2.5	-1.7	-1.7	-1.6	-1.6		-0.5	-0.5	-0.5	-0.5	-0.3
2135		-2.5	-1.7	-1.7	-1.7	-1.6		-0.5	-0.5	-0.5	-0.4	-0.5
2140		-2.5	-1.7	-1.7	-1.7	-1.7		-0.5	-0.5	-0.5	-0.5	-0.8
2145		-2.5	-1.7	-1.7	-1.7	-1.7		-0.5	-0.5	-0.5	-0.5	-0.9
2150		-2.5	-1.7	-1.7	-1.7	-1.8		-0.5	-0.5	-0.5	-0.5	-1.1
2155		-2.5	-1.7	-1.7	-1.7	-1.8		-0.5	-0.5	-0.5	-0.5	-1.2
2160		-2.5	-1.7	-1.7	-1.7	-1.7		-0.5	-0.5	-0.5	-0.5	-2.1

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2165		-2.5	-1.7	-1.7	-1.7	-1.7		-0.5	-0.5	-0.5	-0.6	-2.2
2170		-2.5	-1.7	-1.7	-1.7	-1.6		-0.5	-0.5	-0.5	-0.5	-1.8
2175		-2.5	-1.6	-1.6	-1.7	-1.6		-0.5	-0.5	-0.5	-0.5	-2.5
2180		-2.5	-1.6	-1.6	-1.6	-1.5		-0.5	-0.5	-0.5	-0.5	-2.9
2185		-2.5	-1.6	-1.5	-1.6	-1.5		-0.5	-0.5	-0.5	-0.5	-2.6
2190		-2.5	-1.5	-1.5	-1.5	-1.5		-0.5	-0.5	-0.5	-0.5	-2.5
2195		-2.5	-1.5	-1.5	-1.4	-1.4		-0.5	-0.5	-0.5	-0.5	-2.5
2200		-2.5	-1.4	-1.4	-1.4	-1.4		-0.5	-0.5	-0.5	-0.5	-2.5
2205		-2.5	-1.4	-1.4	-1.3	-1.3		-0.5	-0.5	-0.5	-0.5	-2.5
2210		-2.5	-1.3	-1.3	-1.3	-1.3		-0.5	-0.5	-0.5	-0.5	-2.5
2215		-2.5	-1.3	-1.3	-1.2	-1.2		-0.5	-0.5	-0.5	-0.6	-2.5
2220		-2.5	-1.2	-1.2	-1.2	-1.2		-0.5	-0.5	-0.6	-0.6	-2.5
2225		-2.5	-1.2	-1.2	-1.2	-1.1		-0.6	-0.6	-0.6	-0.7	-2.5
2230		-2.5	-1.2	-1.2	-1.1	-1.1		-0.6	-0.6	-0.6	-0.8	-2.5
2235		-2.5	-1.1	-1.2	-1.1	-1.1		-0.7	-0.7	-0.7	-0.9	-2.5
2240		-2.5	-1.1	-1.1	-1.1	-1.1		-0.7	-0.8	-0.7	-0.9	-2.5
2245		-2.5	-1.1	-1.1	-1.1	-1.0		-0.8	-0.8	-0.8	-1.0	-2.5
2250		-2.5	-1.1	-1.1	-1.0	-1.0		-0.9	-0.9	-0.9	-1.1	-2.5
2255		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-0.9	-1.0	-1.1	-2.5
2260		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.2	-2.5
2265		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2270		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2275		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.4	-2.5
2280		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.3	-1.2	-1.4	-2.5
2285		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.4	-2.5
2290		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.4	-1.3	-1.4	-2.5
2295		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.4	-1.4	-1.4	-2.5
2300		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.4	-1.4	-1.4	-2.5
2305		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.4	-1.4	-1.4	-2.5
2310		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.4	-1.4	-1.5	-2.5
2315		-2.5	-1.0	-1.0	-1.0	-1.0		-1.4	-1.4	-1.4	-1.4	-2.5
2320		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.4	-2.5
2325		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.3	-2.5
2330		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.3	-1.3	-1.3	-2.5
2335		-2.5	-1.0	-1.0	-1.0	-1.0		-1.3	-1.2	-1.3	-1.3	-2.5
2340		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.2	-2.5
2345		-2.5	-1.0	-1.0	-1.0	-0.9		-1.1	-1.1	-1.1	-1.1	-2.5
2350		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.1	-1.1	-1.1	-2.5
2355		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.1	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2360		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2365		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.0	-1.0	-2.5
2370		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2375		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2380		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2385		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2390		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2395		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2400		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2405		-2.5	-1.0	-1.1	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2410		-2.5	-1.0	-1.1	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2415		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.1	-1.0	-1.0	-2.5
2420		-2.5	-1.1	-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.5
2425		-2.5	-1.1	-1.1	-1.0	-1.0		-1.0	-1.1	-1.0	-1.0	-2.5
2430		-2.5	-1.0	-1.1	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2435		-2.5	-1.0	-1.1	-1.0	-1.0		-1.1	-1.1	-1.0	-1.0	-2.5
2440		-2.5	-1.0	-1.1	-1.0	-1.0		-1.1	-1.1	-1.1	-1.0	-2.5
2445		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.1	-1.0	-2.5
2450		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.1	-1.1	-2.5
2455		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.1	-1.1	-2.5
2460		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.1	-1.1	-2.5
2465		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.1	-1.1	-2.5
2470		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.1	-1.2	-1.2	-2.5
2475		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.1	-2.5
2480		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.1	-1.2	-1.1	-2.5
2485		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.2	-1.2	-2.5
2490		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.2	-2.5
2495		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.2	-1.2	-2.5
2500		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.3	-2.5
2505		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.3	-2.5
2510		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.2	-2.5
2515		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.2	-1.3	-2.5
2520		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.2	-1.2	-2.5
2525		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.3	-2.5
2530		-2.5	-1.0	-1.0	-1.0	-1.0		-1.2	-1.2	-1.2	-1.3	-2.5
2535		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.2	-1.2	-2.5
2540		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.2	-1.2	-1.3	-2.5
2545		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.2	-1.2	-2.5
2550		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.2	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2555		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2560		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.1	-1.3	-2.5
2565		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.5
2570		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.5
2575		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.5
2580		-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.1	-1.3	-2.5
2585		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2590		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.4	-2.5
2595		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.4	-2.5
2600		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.4	-2.5
2605		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.4	-2.5
2610		-2.5	-1.0	-1.0	-1.1	-1.1		-1.1	-1.1	-1.1	-1.4	-2.5
2615		-2.5	-1.0	-1.0	-1.1	-1.0		-1.1	-1.1	-1.0	-1.4	-2.4
2620		-2.5	-1.0	-1.0	-1.1	-1.0		-1.1	-1.1	-1.0	-1.3	-2.4
2625		-2.5	-1.0	-1.0	-1.1	-1.0		-1.1	-1.1	-1.0	-1.3	-2.5
2630		-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.0	-1.0	-1.3	-2.5
2635		-2.5	-1.1	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.5
2640		-2.5	-1.3	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.5
2645		-2.5	-1.3	-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.4
2650		-2.5	-1.4	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.3	-2.4
2655		-2.5	-1.5	-1.0	-1.0	-1.0		-1.1	-1.0	-1.0	-1.3	-2.5
2660		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.3	-2.4
2665		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.4	-2.4
2670		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.4	-2.5
2675		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.5	-2.5
2680		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.5	-2.5
2685		-2.5	-1.6	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.5	-2.4
2690		-2.5	-1.6	-1.1	-1.0	-1.0		-1.1	-1.1	-1.1	-1.4	-2.5
2695		-2.5	-1.6	-1.1	-1.0	-0.9		-1.1	-1.1	-1.1	-1.4	-2.5
2700		-2.5	-1.6	-1.1	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.4
2705		-2.5	-1.6	-1.1	-1.0	-1.0		-1.0	-1.1	-1.0	-1.2	-2.4
2710		-2.5	-1.4	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
2715	-2.4	-2.5	-1.3	-1.1	-1.1	-1.0		-1.0	-1.0	-1.0	-1.0	-2.4
2720	-1.7	-2.5	-1.2	-1.0	-1.1	-1.1		-1.0	-1.0	-1.0	-1.0	-2.5
2725	-2.0	-2.5	-1.2	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-2.4
2730	-1.7	-2.5	-1.1	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.1	-2.5
2735	-1.9	-2.5	-1.0	-1.0	-1.0	-1.0		-1.0	-1.1	-1.0	-1.2	-2.4
2740	-2.3	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.4
2745	-2.2	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5

DESIGN CROSS FALLS

CH	-22.40	-20.00	-15.00	-11.25	-7.50	-3.75		3.75	7.50	11.25	15.00	18.75
2750	-1.3	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2755	-1.1	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.4
2760	-0.8	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.4
2765	-0.8	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.1	-1.3	-2.5
2770	-0.7	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.3	-2.4
2775	-0.8	-2.5	-1.0	-1.0	-1.0	-1.0		-1.1	-1.1	-1.0	-1.3	-2.4
2780	-1.1	-2.2	-1.0	-0.9	-1.0	-1.0		-1.1	-1.1	-1.1	-1.2	-2.3
2785	-1.7	-1.8	-1.0	-0.9	-1.0	-0.9		-1.0	-1.0	-1.1	-1.1	-1.8

Airport Pavement Engineering Specialists Pty Ltd
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Appendix 10
Runway 06/24 lifts and crossfalls

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
200	0	1	0	1	0	-1	0	-1	0
205	0	0	19	-4	12	13	7	10	0
210	0	1	-1	-16	8	12	1	2	0
215	0	0	-11	-14	3	6	6	0	0
220	0	1	-21	-12	-3	-2	8	-6	0
225	0	3	-9	-12	-1	2	13	0	0
230	0	1	2	-12	-1	5	17	1	0
235	0	2	2	-6	13	20	17	9	0
240	0	2	3	-1	27	35	15	16	0
244	0	0	-1	-10	32	29	10	5	1
250		-3	-5	-19	36	23	5	2	
255		-7	-2	0	40	23	10	7	
260		-13	3	19	45	24	17	8	
265		1	10	27	44	24	19	5	
270		4	11	33	40	23	23	11	
275		-2	6	28	27	15	21	6	
280		-2	3	24	12	6	19	6	
285		-1	10	29	9	10	14	6	
290		4	18	34	6	14	11	0	
295		2	10	17	2	7	4	-1	
300		2	5	0	-1	-1	-9	-5	
305		1	5	2	6	6	-1	0	
310		1	5	6	13	12	3	1	
315		-4	-5	-5	9	7	-11	3	
320		-9	-16	-17	6	4	-23	-6	
325		-10	-19	-14	10	0	-16	-3	
330		-13	-24	-11	13	-2	-9	-1	
335		-9	-23	-17	6	-9	-9	0	
340		-6	-22	-24	-2	-15	-11	-3	
345		-5	-26	-26	-3	-15	-2	-1	
350		-5	-34	-31	-6	-16	6	0	
355		-4	-24	-26	1	1	11	5	
360		-3	-14	-22	8	19	20	5	
365		1	-7	-20	10	30	15	3	
370		5	2	-15	12	43	13	2	
375		-1	0	-10	17	36	10	1	
380		-3	-2	-5	22	28	3	0	
385		-4	-10	-8	18	12	-5	-1	
390		-4	-17	-10	15	-4	-13	-6	

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
395		-2	-11	-9	14	-5	-10	-8	
400		4	-1	-5	13	-5	-6	-3	
405		-1	-6	-5	10	-8	-2	-2	
410		-7	-7	-1	10	-7	4	2	
415		-7	-9	-6	6	-9	0	0	
420		-8	-11	-12	1	-9	-3	-1	
425		-9	-12	-9	-3	-10	-9	0	
430		-8	-14	-6	-7	-11	-20	-5	
435		-7	-11	-9	-5	-22	-17	-3	
440		-9	-12	-15	-3	-36	-18	-3	
445		-8	-11	-14	-1	-33	-16	-5	
450		-8	-14	-18	-2	-31	-14	-3	
455		-6	-11	-10	-3	-24	-10	-4	
460		-6	-11	-6	-8	-18	-5	2	
465		-9	-11	-5	-1	-17	-8	0	
470		-8	-11	-2	6	-15	-10	-3	
475		-7	-12	-1	7	-9	-3	-1	
480		-2	-8	7	13	0	3	0	
485		-2	-13	-9	6	1	-9	-5	
490		-3	-16	-21	4	9	-14	-6	
495		-4	-15	-20	-3	13	-8	-3	
500		-2	-14	-17	-9	19	-2	3	
505		0	-5	-12	3	23	8	5	
510		3	4	-7	14	29	20	11	
515		2	1	-1	11	27	17	3	
520		-3	-1	7	8	28	17	2	
525		-1	1	1	6	24	7	-2	
530		7	8	-2	3	21	-2	-2	
535		4	1	-3	-3	3	-15	-4	
540		-8	-8	-3	-10	-14	-29	-7	
545		-6	-10	2	-2	-7	-21	-7	
550		-7	-13	7	4	-1	-15	-11	
555		-4	-8	4	0	-1	-1	-6	
560		-5	-4	3	-7	-2	11	4	
565		-8	-10	0	-2	-4	-2	0	
570		-12	-15	-4	1	-6	-13	-8	
575		-3	-8	-4	-6	-3	-5	-7	
580		0	-4	-7	-15	0	2	-2	
585		-2	-3	-2	-3	8	8	1	

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
590		-2	-4	3	9	19	16	0	
595		-5	-7	-1	13	18	6	1	
600		-10	-10	-2	19	15	-6	-1	
605		-8	-8	7	22	9	-8	-5	
610		-3	-7	17	28	6	-10	-5	
615		3	11	35	36	-3	-22	-6	
620		11	29	51	43	-13	-34	-8	
625		9	28	58	49	1	-19	0	
630		6	23	62	55	15	-5	3	
635		6	16	59	63	26	-3	4	
640		3	7	55	71	38	2	1	
645		5	9	56	80	42	0	3	
650		5	17	60	91	47	-2	1	
655		1	9	59	99	41	-6	0	
660		0	4	58	106	33	-11	-5	
665		0	2	50	88	28	2	-1	
670		2	-5	37	68	20	13	6	
675		3	3	41	63	23	5	3	
680		2	14	43	55	24	0	1	
685		1	9	32	53	20	-7	0	
690		1	11	27	49	16	-13	0	
695		0	12	29	49	16	-10	0	
700		2	11	30	50	17	-6	1	
705		4	4	12	41	7	-12	-3	
710		5	-9	-7	32	0	-17	-3	
715		3	-9	-11	9	-4	-7	1	
720		-2	-8	-13	-16	-9	-1	-1	
725		-3	-9	-18	-12	-4	-8	-10	
730		-3	-10	-25	-9	-1	-15	-9	
735		-5	-9	-11	1	-1	-13	-4	
740		-11	-9	2	11	-2	-6	-3	
745		-13	-5	6	4	-4	-7	-4	
750		-14	-8	6	-5	-7	-8	-1	
755		-9	-7	-1	-3	-7	-8	2	
760		-6	-7	-9	-2	-11	-11	-8	
765		-2	1	-3	0	-11	-10	-3	
770		1	7	4	3	-7	-3	-3	
775		3	12	22	28	18	5	-3	
780		4	17	41	54	43	14	4	

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
785		9	32	50	65	52	20	8	
790		17	50	60	74	59	25	8	
795		9	25	48	82	62	19	7	
800		3	3	36	87	62	10	0	
805		6	10	49	87	61	29	6	
810		10	17	62	85	60	47	14	
815		15	28	61	79	53	35	13	
820		18	40	59	74	45	25	7	
825		4	15	32	52	36	12	0	
830		-2	-5	6	30	25	-5	-6	
835		-3	-2	3	21	9	-11	-9	
840		-6	3	0	11	-9	-17	-7	
845		-5	-6	1	9	-10	-18	-5	
850		-5	-15	3	8	-9	-15	-10	
855		-8	-8	5	8	-10	-21	-8	
860		-10	-1	9	7	-8	-23	-8	
865		-9	-4	6	3	-11	-22	-8	
870		-8	-9	2	3	-12	-19	-3	
875		-10	-18	-7	-2	-4	-19	-4	
880		-21	-31	-14	-5	5	-19	-4	
885		-15	-25	-8	-3	1	-20	-4	
890		-13	-17	-1	-1	-3	-17	-7	
895		-10	-13	1	-2	0	-21	-7	
900		-5	-5	5	-2	3	-22	-6	
905		-7	-9	-3	-6	2	-25	-9	
910		-13	-14	-11	-12	-2	-32	-15	
915		-6	-12	-6	1	7	-25	-12	
920		-2	-11	-1	12	16	-19	-9	
925		-3	-8	18	40	31	4	3	
930		-5	-3	36	67	47	26	9	
935		1	10	38	61	44	22	14	
940		7	23	40	55	42	20	8	
945		3	24	41	50	31	9	-4	
950		0	24	40	43	15	-7	-3	
955		-3	9	22	34	15	-11	-4	
960		-4	-12	-2	21	10	-19	-10	
965		-7	-13	11	33	17	-12	-11	
970		-15	-21	19	41	19	-13	-2	
975		-5	5	21	39	29	3	2	

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
980		7	25	20	33	33	9	9	
985		3	22	33	46	38	8	0	
990		1	21	45	57	46	14	5	
995		7	21	38	35	22	-8	-2	
1000		10	21	31	14	0	-29	-13	
1005		4	6	20	9	-11	-29	-10	
1010		-1	-10	9	5	-23	-33	-12	
1015		-5	-4	14	16	-14	-25	-7	
1020		-5	4	20	29	-6	-18	-2	
1025		-5	-2	8	9	-11	-19	-5	
1030		-4	-7	-2	-10	-14	-17	-8	
1035		-4	-4	17	6	-10	-19	-7	
1040		-3	2	39	23	-2	-18	-6	
1045		-4	-4	25	33	12	-11	-1	
1050		-5	-7	13	46	27	-3	0	
1055		-5	-11	5	37	11	-15	-3	
1060		-3	-9	-1	29	-1	-24	-5	
1065		-3	-9	-2	21	-3	-18		
1070		-4	-7	1	16	-7	-39		
1075		-5	-8	3	17	-6	-15		
1080		-6	-9	8	21	-3	-10		
1085		-7	-5	13	27	5	-2		
1090		-8	0	18	36	13	-11		
1095		-6	2	20	29	11	-4		
1100		-4	7	24	23	11	-5	-9	
1105		-8	0	16	31	16	5	-1	
1110		-13	-7	8	38	21	0	3	
1115		-8	-4	10	31	20	-5	0	
1120		-3	1	14	24	21	-9	-3	
1125		-7	-8	-1	14	4	-20	-8	
1130		-7	-10	-10	4	-13	-31	-7	
1135		-7	-13	-5	1	-18	-24	-10	
1140		-8	-14	3	-2	-21	-16	-9	
1145		-8	-12	1	0	-16	-17	-4	
1150		-9	-12	0	3	-10	-17	-3	
1155		-4	-2	0	6	-11	-15	0	
1160		-3	2	-2	11	-10	-13	1	
1165		-3	-5	-8	5	-10	-20	3	
1170		-2	-12	-12	-2	-11	-30	-9	

LIFT FROM EXISTING TO DESIGN

CH	-15.00	-11.25	-7.50	-3.75	0.00	3.75	7.50	11.25	15.00
1175		0	-5	-2	3	-14	-28	-11	
1180		4	1	7	5	-18	-24	-9	
1185		1	-12	-8	4	-27	-25	-9	
1190		5	-8	-5	5	-34	-21	-11	
1195		3	-4	-2	3	-18	-12	-9	
1200		3	-1	0	0	0	0	-5	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
200	-1.4	-1.9	-2.1	-1.2		-1.0	-0.7	-1.0	-1.7
205	-1.7	-1.7	-1.9	-0.9		-0.9	-0.6	-0.9	-1.3
210	-2.0	-1.5	-1.7	-0.7		-0.9	-0.4	-0.7	-0.9
215	-1.8	-1.7	-1.4	-0.9		-0.7	-0.6	-0.4	-0.6
220	-1.7	-1.8	-1.1	-1.1		-0.6	-0.9	-0.2	-0.4
225	-1.3	-1.5	-1.4	-1.0		-0.7	-0.9	-0.2	-0.4
230	-0.9	-1.2	-1.7	-1.0		-0.7	-0.9	-0.1	-0.5
235	-0.9	-1.3	-1.5	-0.8		-0.8	-0.5	-0.4	-0.4
240	-1.0	-1.3	-1.4	-0.5		-0.8	-0.1	-0.6	-0.3
244	-1.2	-1.3	-1.5	-0.2		-0.5	-0.1	-0.5	-0.4
250		-1.3	-1.7	0.2		-0.2	-0.1	-0.4	
255		-1.1	-1.3	-0.2		-0.1	-0.2	-0.3	
260		-0.8	-0.9	-0.6		0.1	-0.3	-0.3	
265		-1.1	-0.9	-0.9		0.0	-0.3	-0.5	
270		-1.3	-0.8	-1.2		0.0	-0.5	-0.4	
275		-1.4	-0.9	-1.5		-0.2	-0.6	-0.3	
280		-1.8	-0.9	-1.8		-0.3	-0.8	-0.3	
285		-1.5	-1.0	-2.0		-0.5	-0.6	-0.5	
290		-1.4	-1.0	-2.2		-0.7	-0.4	-0.5	
295		-1.4	-1.3	-1.9		-0.6	-0.4	-0.5	
300		-1.5	-1.5	-1.5		-0.6	-0.3	-0.5	
305		-1.5	-1.5	-1.3		-0.6	-0.5	-0.8	
310		-1.5	-1.3	-1.2		-0.7	-0.5	-0.9	
315		-1.4	-1.3	-0.9		-0.9	-0.4	-1.4	
320		-1.4	-1.3	-0.7		-1.0	-0.3	-1.7	
325		-1.5	-1.2	-0.7		-0.9	-0.7	-1.8	
330		-1.6	-1.0	-0.8		-0.8	-1.0	-1.8	
335		-1.9	-1.3	-0.9		-0.8	-1.2	-1.7	
340		-2.2	-1.7	-1.0		-0.8	-1.3	-1.5	
345		-2.3	-1.6	-1.0		-0.8	-1.5	-1.3	
350		-2.4	-1.6	-1.0		-0.9	-1.7	-1.1	
355		-2.3	-1.8	-1.0		-1.1	-1.4	-1.0	
360		-2.1	-1.9	-0.9		-1.3	-1.1	-0.8	
365		-2.1	-2.1	-1.0		-1.5	-0.6	-0.7	
370		-2.0	-2.2	-1.0		-1.7	-0.1	-0.7	
375		-1.9	-2.0	-1.0		-1.3	0.0	-0.6	
380		-1.9	-1.8	-1.0		-0.8	0.0	-0.6	
385		-1.9	-1.7	-1.0		-0.4	-0.2	-0.7	
390		-2.0	-1.6	-1.1		0.0	-0.3	-0.8	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
395		-2.0	-1.7	-1.1		0.0	-0.4	-0.5	
400		-2.0	-1.8	-1.2		-0.1	-0.5	-0.4	
405		-1.9	-1.7	-1.3		-0.1	-0.7	-0.4	
410		-1.6	-1.5	-1.3		-0.1	-0.8	-0.5	
415		-1.6	-1.5	-1.3		-0.2	-0.8	-0.4	
420		-1.5	-1.5	-1.2		-0.3	-0.7	-0.5	
425		-1.6	-1.4	-1.4		-0.3	-0.5	-0.8	
430		-1.6	-1.3	-1.5		-0.5	-0.3	-0.9	
435		-1.6	-1.4	-1.4		-0.2	-0.8	-1.1	
440		-1.5	-1.6	-1.2		0.1	-1.3	-1.2	
445		-1.6	-1.6	-1.1		-0.1	-1.4	-1.3	
450		-1.7	-1.6	-1.1		-0.3	-1.5	-1.5	
455		-1.9	-1.5	-1.3		-0.5	-1.4	-1.2	
460		-1.9	-1.4	-1.5		-0.7	-1.3	-1.0	
465		-1.6	-1.3	-1.3		-0.5	-1.1	-0.9	
470		-1.3	-1.1	-1.1		-0.2	-0.9	-0.7	
475		-1.3	-1.0	-1.1		-0.3	-0.9	-0.8	
480		-1.5	-0.8	-1.0		-0.4	-0.8	-0.8	
485		-1.4	-1.0	-0.7		-0.6	-0.5	-0.8	
490		-1.3	-1.2	-0.4		-0.9	-0.1	-0.9	
495		-1.5	-1.3	-0.7		-1.1	-0.2	-0.8	
500		-1.6	-1.3	-1.0		-1.5	-0.2	-0.9	
505		-1.5	-1.5	-0.9		-1.3	-0.4	-0.8	
510		-1.5	-1.6	-0.8		-1.2	-0.6	-0.9	
515		-1.7	-1.5	-1.1		-1.3	-0.6	-0.7	
520		-1.8	-1.3	-1.5		-1.4	-0.6	-0.6	
525		-1.8	-1.6	-1.5		-1.4	-0.4	-0.8	
530		-2.0	-1.9	-1.5		-1.3	-0.2	-1.2	
535		-2.1	-1.7	-1.6		-1.0	-0.3	-1.3	
540		-2.1	-1.4	-1.7		-0.7	-0.4	-1.4	
545		-2.0	-1.1	-1.6		-0.7	-0.5	-1.2	
550		-1.8	-0.9	-1.5		-0.7	-0.5	-0.9	
555		-1.7	-1.0	-1.4		-0.8	-0.8	-0.9	
560		-1.5	-1.0	-1.4		-1.0	-1.2	-1.1	
565		-1.2	-0.8	-1.1		-0.8	-1.0	-1.1	
570		-1.0	-0.7	-0.8		-0.7	-0.7	-1.0	
575		-1.2	-0.8	-1.0		-0.9	-0.8	-0.8	
580		-1.2	-1.0	-1.1		-1.1	-0.9	-0.7	
585		-1.2	-0.9	-0.9		-1.0	-0.8	-0.8	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
590		-1.3	-0.7	-0.7		-0.9	-0.7	-0.8	
595		-1.1	-0.8	-0.6		-0.7	-0.3	-0.8	
600		-0.8	-0.8	-0.5		-0.5	-0.1	-0.7	
605		-0.7	-0.7	-0.7		-0.2	-0.1	-0.8	
610		-0.7	-0.5	-0.9		0.1	-0.1	-0.9	
615		-0.9	-0.5	-1.1		0.5	0.0	-1.0	
620		-1.0	-0.6	-1.4		1.0	0.0	-1.0	
625		-0.8	-0.4	-1.4		0.7	0.0	-1.0	
630		-0.6	-0.2	-1.4		0.5	-0.1	-0.9	
635		-0.9	-0.2	-1.2		0.4	0.1	-0.9	
640		-1.0	-0.1	-1.0		0.3	0.3	-0.8	
645		-1.3	-0.3	-0.9		0.4	0.5	-0.7	
650		-1.5	-0.4	-0.8		0.6	0.7	-0.5	
655		-1.5	-0.3	-0.6		0.9	0.6	-0.7	
660		-1.5	-0.2	-0.3		1.3	0.6	-0.7	
665		-1.5	-0.3	-0.6		0.9	0.0	-0.8	
670		-1.4	-0.5	-0.9		0.6	-0.5	-0.9	
675		-1.6	-0.7	-1.1		0.3	-0.3	-0.7	
680		-1.6	-1.0	-1.4		0.1	-0.1	-0.7	
685		-1.7	-1.1	-1.2		0.2	0.0	-0.7	
690		-1.7	-1.2	-1.0		0.3	0.1	-0.8	
695		-1.3	-1.0	-0.9		0.2	0.0	-0.8	
700		-0.9	-0.9	-0.9		0.2	-0.1	-0.7	
705		-1.2	-1.0	-0.5		0.3	-0.2	-0.9	
710		-1.6	-1.2	-0.2		0.3	-0.3	-1.1	
715		-1.5	-1.2	-0.7		-0.2	-0.6	-0.9	
720		-1.3	-1.3	-1.2		-0.7	-0.9	-0.5	
725		-1.2	-1.3	-0.9		-0.8	-0.6	-0.6	
730		-1.0	-1.4	-0.6		-0.8	-0.3	-1.0	
735		-1.0	-1.0	-0.6		-0.5	-0.4	-0.9	
740		-0.9	-0.6	-0.7		-0.3	-0.6	-0.8	
745		-0.9	-0.5	-0.9		-0.4	-0.6	-0.6	
750		-0.8	-0.5	-1.1		-0.6	-0.6	-0.6	
755		-0.9	-0.7	-0.9		-0.5	-0.7	-1.0	
760		-1.0	-0.9	-0.7		-0.5	-0.8	-1.1	
765		-1.0	-1.1	-0.9		-0.5	-0.9	-1.0	
770		-1.0	-1.1	-1.1		-0.6	-0.9	-0.8	
775		-1.2	-0.9	-1.0		-0.5	-0.5	-0.4	
780		-1.3	-0.7	-0.9		-0.5	-0.1	-0.3	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
785		-1.4	-0.9	-1.0		-0.4	0.1	-0.6	
790		-1.6	-1.2	-1.1		-0.3	0.2	-0.8	
795		-1.3	-0.9	-0.6		-0.1	0.5	-0.5	
800		-1.0	-0.6	-0.2		0.0	0.7	0.0	
805		-1.2	-0.5	-0.5		0.1	0.2	-0.1	
810		-1.4	-0.3	-0.9		0.0	-0.3	-0.3	
815		-1.4	-0.6	-1.0		0.1	-0.2	-0.6	
820		-1.3	-1.0	-1.1		0.2	-0.1	-0.7	
825		-1.3	-1.0	-0.9		-0.1	0.1	-0.5	
830		-1.4	-1.1	-0.7		-0.5	0.2	-0.4	
835		-1.3	-1.2	-0.8		-0.3	-0.2	-0.6	
840		-1.2	-1.3	-0.9		-0.2	-0.6	-1.0	
845		-1.3	-0.9	-0.9		-0.4	-0.7	-1.2	
850		-1.5	-0.6	-0.9		-0.5	-0.8	-1.3	
855		-1.1	-0.6	-0.9		-0.6	-0.8	-1.4	
860		-0.7	-0.6	-0.9		-0.7	-0.7	-1.4	
865		-0.6	-0.5	-0.9		-0.7	-0.7	-1.3	
870		-0.6	-0.5	-0.7		-0.6	-0.8	-1.3	
875		-1.0	-0.5	-0.6		-0.9	-0.6	-1.2	
880		-1.1	-0.4	-0.6		-1.2	-0.3	-1.2	
885		-1.0	-0.5	-0.8		-1.1	-0.4	-1.3	
890		-0.9	-0.5	-1.0		-0.9	-0.6	-1.3	
895		-1.0	-0.7	-1.1		-1.0	-0.3	-1.2	
900		-1.2	-0.8	-1.3		-1.0	-0.2	-1.2	
905		-1.2	-0.9	-1.2		-1.0	-0.1	-1.1	
910		-1.2	-1.0	-1.1		-1.1	0.0	-0.9	
915		-1.4	-1.0	-1.0		-1.0	0.1	-0.9	
920		-1.5	-0.9	-0.8		-0.9	0.1	-1.0	
925		-1.2	-0.4	-0.5		-0.6	-0.1	-1.1	
930		-0.8	0.0	-0.2		-0.3	-0.2	-1.1	
935		-1.1	-0.2	-0.4		-0.3	-0.2	-0.8	
940		-1.4	-0.5	-0.5		-0.4	-0.1	-0.1	
945		-1.0	-0.4	-0.6		-0.2	-0.1	-0.3	
950		-0.7	-0.3	-0.7		0.0	-0.2	-0.9	
955		-0.7	-0.3	-0.4		-0.2	0.0	-0.9	
960		-0.7	-0.4	-0.1		-0.4	0.1	-0.8	
965		-0.6	0.0	-0.1		-0.2	0.1	-0.6	
970		-0.4	0.5	0.0		-0.1	0.2	-0.7	
975		-0.6	-0.2	-0.2		-0.4	0.1	-0.6	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
980		-0.8	-0.8	-0.3		-0.7	-0.1	-0.6	
985		-0.6	-0.5	-0.4		-0.6	0.0	-0.7	
990		-0.4	-0.2	-0.5		-0.6	0.0	-1.2	
995		-0.7	-0.3	-0.9		-0.4	0.0	-1.0	
1000		-1.0	-0.5	-1.3		-0.3	0.1	-0.8	
1005		-0.9	-0.5	-1.1		-0.2	-0.3	-1.1	
1010		-0.9	-0.4	-1.0		-0.1	-0.6	-1.3	
1015		-0.8	-0.4	-0.8		-0.1	-0.6	-1.6	
1020		-0.7	-0.5	-0.7		-0.1	-0.7	-1.8	
1025		-0.9	-0.7	-1.0		-0.5	-0.8	-1.5	
1030		-1.2	-0.9	-1.3		-0.9	-0.9	-1.3	
1035		-1.2	-0.5	-1.4		-0.5	-0.7	-1.3	
1040		-1.3	-0.1	-1.5		-0.2	-0.4	-1.4	
1045		-1.3	-0.4	-1.0		-0.2	-0.2	-1.4	
1050		-1.3	-0.7	-0.3		-0.2	0.1	-1.2	
1055		-1.4	-0.9	-0.4		0.1	0.1	-1.1	
1060		-1.5	-1.1	-0.5		0.2	0.1	-1.0	
1065		-1.4	-1.1	-0.7		0.2	-0.1		
1070		-1.4	-1.1	-0.9		0.1	0.4		
1075		-1.3	-0.9	-0.9		0.1	-0.2		
1080		-1.3	-0.8	-0.9		0.2	-0.3		
1085		-1.0	-0.7	-0.8		0.1	-0.3		
1090		-0.7	-0.7	-0.7		0.1	0.2		
1095		-0.9	-0.7	-0.9		0.0	-0.1		
1100		-1.1	-0.7	-1.1		-0.1	-0.1	-0.5	
1105		-1.0	-0.6	-0.6		-0.1	-0.2	-0.6	
1110		-0.9	-0.6	-0.2		0.0	0.1	-1.0	
1115		-1.2	-0.7	-0.5		-0.2	0.2	-0.8	
1120		-1.6	-0.7	-0.8		-0.4	0.3	-0.6	
1125		-1.3	-0.9	-0.7		-0.3	0.1	-0.8	
1130		-1.2	-1.1	-0.7		-0.1	-0.1	-1.2	
1135		-1.1	-0.8	-0.9		-0.1	-0.4	-1.0	
1140		-1.0	-0.6	-1.1		-0.1	-0.7	-1.0	
1145		-0.9	-0.6	-1.0		-0.2	-0.6	-1.1	
1150		-0.9	-0.6	-0.9		-0.3	-0.5	-1.1	
1155		-0.9	-0.9	-0.8		-0.2	-0.5	-1.1	
1160		-0.9	-1.2	-0.7		-0.1	-0.6	-1.0	
1165		-1.2	-1.2	-0.8		-0.3	-0.4	-1.5	
1170		-1.6	-1.3	-1.0		-0.5	-0.2	-1.6	

EXISTING CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
1175		-1.5	-1.1	-1.1		-0.3	-0.3	-1.3	
1180		-1.5	-1.0	-1.3		-0.1	-0.5	-1.1	
1185		-1.5	-1.1	-0.8		0.1	-0.7	-1.2	
1190		-1.7	-1.1	-0.4		0.4	-1.0	-1.2	
1195		-1.7	-1.1	-0.3		0.0	-0.7	-1.1	
1200		-1.7	-1.2	-0.3		-0.5	-0.3	-1.1	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
200	-1.4	-1.8	-2.1	-1.1		-1.0	-0.7	-1.0	-1.7
205	-1.7	-2.2	-1.3	-1.3		-0.9	-0.7	-0.8	-1.5
210	-2.0	-1.5	-1.3	-1.3		-0.8	-0.7	-0.6	-0.9
215	-1.8	-1.4	-1.3	-1.3		-0.7	-0.6	-0.6	-0.6
220	-1.8	-1.2	-1.3	-1.3		-0.6	-0.6	-0.6	-0.2
225	-1.4	-1.2	-1.3	-1.3		-0.6	-0.6	-0.5	-0.4
230	-1.0	-1.3	-1.3	-1.3		-0.6	-0.6	-0.5	-0.5
235	-1.0	-1.3	-1.3	-1.3		-0.6	-0.6	-0.6	-0.7
240	-1.0	-1.3	-1.3	-1.3		-0.6	-0.6	-0.6	-0.7
244	-1.2	-1.3	-1.3	-1.3		-0.6	-0.6	-0.6	-0.5
250		-1.3	-1.3	-1.3		-0.5	-0.5	-0.5	
255		-1.3	-1.3	-1.3		-0.5	-0.5	-0.4	
260		-1.2	-1.3	-1.3		-0.5	-0.5	-0.6	
265		-1.3	-1.3	-1.4		-0.5	-0.5	-0.9	
270		-1.5	-1.4	-1.4		-0.5	-0.5	-0.7	
275		-1.7	-1.5	-1.5		-0.5	-0.5	-0.7	
280		-1.9	-1.5	-1.5		-0.5	-0.5	-0.6	
285		-1.8	-1.5	-1.5		-0.5	-0.5	-0.7	
290		-1.8	-1.5	-1.5		-0.5	-0.5	-0.8	
295		-1.7	-1.5	-1.5		-0.5	-0.5	-0.7	
300		-1.6	-1.4	-1.4		-0.6	-0.6	-0.4	
305		-1.6	-1.4	-1.4		-0.6	-0.6	-0.8	
310		-1.6	-1.4	-1.4		-0.8	-0.8	-1.0	
315		-1.4	-1.3	-1.3		-0.9	-0.9	-1.1	
320		-1.3	-1.3	-1.3		-1.0	-1.0	-1.2	
325		-1.3	-1.3	-1.4		-1.1	-1.1	-1.4	
330		-1.3	-1.4	-1.4		-1.2	-1.2	-1.6	
335		-1.5	-1.5	-1.5		-1.2	-1.2	-1.5	
340		-1.7	-1.6	-1.6		-1.2	-1.2	-1.3	
345		-1.7	-1.6	-1.6		-1.1	-1.2	-1.3	
350		-1.6	-1.7	-1.7		-1.1	-1.1	-1.3	
355		-1.7	-1.7	-1.7		-1.1	-1.1	-1.2	
360		-1.8	-1.7	-1.7		-1.0	-1.0	-1.2	
365		-1.9	-1.7	-1.8		-1.0	-1.0	-1.0	
370		-2.0	-1.8	-1.7		-0.9	-0.9	-1.0	
375		-2.0	-1.7	-1.8		-0.7	-0.7	-0.9	
380		-1.9	-1.7	-1.8		-0.7	-0.7	-0.7	
385		-1.8	-1.8	-1.7		-0.6	-0.6	-0.6	
390		-1.6	-1.8	-1.7		-0.5	-0.5	-0.6	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
395		-1.7	-1.8	-1.7		-0.5	-0.5	-0.4	
400		-1.8	-1.7	-1.7		-0.5	-0.5	-0.3	
405		-1.7	-1.7	-1.7		-0.5	-0.5	-0.4	
410		-1.6	-1.6	-1.6		-0.5	-0.5	-0.5	
415		-1.6	-1.6	-1.6		-0.6	-0.5	-0.4	
420		-1.4	-1.5	-1.5		-0.5	-0.5	-0.4	
425		-1.5	-1.5	-1.5		-0.5	-0.5	-0.5	
430		-1.5	-1.5	-1.5		-0.6	-0.5	-0.5	
435		-1.5	-1.5	-1.5		-0.7	-0.7	-0.7	
440		-1.4	-1.5	-1.5		-0.8	-0.8	-0.8	
445		-1.6	-1.5	-1.5		-1.0	-1.0	-1.0	
450		-1.6	-1.5	-1.5		-1.1	-1.1	-1.2	
455		-1.7	-1.5	-1.5		-1.0	-1.1	-1.0	
460		-1.8	-1.5	-1.5		-1.0	-1.0	-0.8	
465		-1.5	-1.4	-1.4		-0.9	-0.9	-0.7	
470		-1.2	-1.4	-1.3		-0.8	-0.8	-0.5	
475		-1.2	-1.3	-1.3		-0.7	-0.7	-0.7	
480		-1.3	-1.2	-1.2		-0.7	-0.7	-0.9	
485		-1.1	-1.1	-1.1		-0.7	-0.7	-0.7	
490		-1.0	-1.1	-1.1		-0.7	-0.7	-0.7	
495		-1.2	-1.1	-1.1		-0.7	-0.7	-0.7	
500		-1.3	-1.2	-1.2		-0.7	-0.8	-0.7	
505		-1.4	-1.3	-1.3		-0.8	-0.8	-0.9	
510		-1.5	-1.3	-1.4		-0.8	-0.9	-1.1	
515		-1.6	-1.4	-1.4		-0.9	-0.9	-1.0	
520		-1.8	-1.5	-1.5		-0.9	-0.9	-1.0	
525		-1.8	-1.6	-1.6		-0.9	-0.9	-1.1	
530		-2.0	-1.6	-1.6		-0.9	-0.9	-1.2	
535		-2.0	-1.6	-1.6		-0.9	-0.8	-1.0	
540		-2.1	-1.5	-1.5		-0.8	-0.8	-0.8	
545		-1.9	-1.5	-1.5		-0.8	-0.8	-0.8	
550		-1.7	-1.4	-1.4		-0.8	-0.8	-0.8	
555		-1.6	-1.3	-1.3		-0.9	-0.8	-1.1	
560		-1.5	-1.2	-1.1		-0.9	-0.9	-1.3	
565		-1.2	-1.1	-1.1		-0.9	-0.9	-1.1	
570		-0.9	-1.0	-1.0		-0.9	-0.9	-0.9	
575		-1.0	-0.9	-0.9		-0.8	-0.9	-0.9	
580		-1.0	-0.9	-0.9		-0.7	-0.9	-0.8	
585		-1.2	-0.9	-0.9		-0.7	-0.8	-1.0	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
590		-1.3	-0.9	-0.9		-0.6	-0.7	-1.2	
595		-1.0	-1.0	-1.0		-0.6	-0.7	-1.0	
600		-0.8	-1.0	-1.0		-0.6	-0.6	-0.6	
605		-0.7	-1.1	-1.1		-0.5	-0.5	-0.7	
610		-0.6	-1.1	-1.2		-0.5	-0.5	-0.8	
615		-1.1	-1.2	-1.1		-0.5	-0.5	-0.6	
620		-1.5	-1.2	-1.2		-0.5	-0.5	-0.3	
625		-1.3	-1.2	-1.2		-0.5	-0.5	-0.5	
630		-1.1	-1.3	-1.3		-0.5	-0.6	-0.7	
635		-1.1	-1.3	-1.3		-0.6	-0.6	-0.7	
640		-1.1	-1.4	-1.4		-0.6	-0.6	-0.8	
645		-1.4	-1.5	-1.5		-0.6	-0.6	-0.6	
650		-1.8	-1.5	-1.6		-0.6	-0.6	-0.4	
655		-1.7	-1.6	-1.6		-0.6	-0.6	-0.5	
660		-1.6	-1.6	-1.6		-0.6	-0.6	-0.6	
665		-1.5	-1.6	-1.6		-0.7	-0.7	-0.8	
670		-1.2	-1.7	-1.7		-0.7	-0.7	-1.0	
675		-1.6	-1.7	-1.7		-0.7	-0.8	-0.8	
680		-1.9	-1.7	-1.7		-0.7	-0.8	-0.6	
685		-1.9	-1.7	-1.8		-0.7	-0.7	-0.6	
690		-2.0	-1.6	-1.6		-0.6	-0.6	-0.5	
695		-1.6	-1.5	-1.5		-0.6	-0.7	-0.5	
700		-1.2	-1.4	-1.4		-0.7	-0.7	-0.6	
705		-1.2	-1.3	-1.3		-0.6	-0.7	-0.6	
710		-1.2	-1.2	-1.2		-0.6	-0.8	-0.8	
715		-1.2	-1.2	-1.2		-0.6	-0.7	-0.7	
720		-1.2	-1.1	-1.1		-0.6	-0.7	-0.5	
725		-1.0	-1.1	-1.1		-0.6	-0.7	-0.6	
730		-0.8	-1.0	-1.0		-0.6	-0.7	-0.8	
735		-0.9	-0.9	-1.0		-0.6	-0.7	-0.7	
740		-1.0	-0.9	-0.9		-0.6	-0.7	-0.7	
745		-1.1	-0.8	-0.8		-0.6	-0.7	-0.5	
750		-1.0	-0.8	-0.8		-0.6	-0.6	-0.4	
755		-1.0	-0.9	-0.8		-0.6	-0.7	-0.8	
760		-1.0	-0.9	-0.9		-0.7	-0.8	-1.0	
765		-1.1	-1.0	-1.0		-0.8	-0.8	-0.8	
770		-1.2	-1.1	-1.1		-0.8	-0.8	-0.8	
775		-1.4	-1.2	-1.2		-0.8	-0.8	-0.6	
780		-1.6	-1.3	-1.3		-0.8	-0.8	-0.6	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
785		-2.0	-1.4	-1.4		-0.8	-0.8	-0.9	
790		-2.5	-1.5	-1.4		-0.7	-0.7	-1.3	
795		-1.7	-1.5	-1.5		-0.7	-0.7	-0.8	
800		-1.0	-1.5	-1.5		-0.6	-0.6	-0.3	
805		-1.3	-1.5	-1.5		-0.6	-0.6	-0.8	
810		-1.6	-1.5	-1.5		-0.6	-0.6	-1.2	
815		-1.8	-1.5	-1.5		-0.6	-0.6	-1.2	
820		-1.9	-1.5	-1.5		-0.6	-0.6	-1.2	
825		-1.6	-1.5	-1.4		-0.6	-0.6	-0.8	
830		-1.3	-1.4	-1.4		-0.6	-0.6	-0.4	
835		-1.3	-1.3	-1.3		-0.7	-0.7	-0.6	
840		-1.4	-1.2	-1.2		-0.8	-0.8	-0.7	
845		-1.3	-1.1	-1.1		-0.9	-0.9	-0.8	
850		-1.2	-1.1	-1.0		-1.0	-1.0	-1.1	
855		-1.1	-1.0	-1.0		-1.1	-1.1	-1.0	
860		-0.9	-0.9	-0.9		-1.1	-1.1	-1.0	
865		-0.8	-0.8	-0.8		-1.0	-1.0	-0.9	
870		-0.6	-0.8	-0.8		-1.0	-1.0	-0.9	
875		-0.8	-0.7	-0.8		-1.0	-1.0	-0.8	
880		-0.8	-0.9	-0.8		-1.0	-1.0	-0.8	
885		-0.8	-0.9	-0.9		-1.0	-1.0	-0.8	
890		-0.8	-1.0	-1.0		-1.0	-1.0	-1.0	
895		-0.9	-1.0	-1.0		-0.9	-0.9	-0.8	
900		-1.2	-1.1	-1.1		-0.9	-0.8	-0.8	
905		-1.2	-1.1	-1.1		-0.8	-0.8	-0.7	
910		-1.2	-1.1	-1.1		-0.8	-0.8	-0.4	
915		-1.2	-1.1	-1.1		-0.8	-0.8	-0.6	
920		-1.3	-1.2	-1.1		-0.8	-0.8	-0.8	
925		-1.0	-1.1	-1.1		-0.8	-0.8	-1.2	
930		-0.8	-1.0	-1.0		-0.8	-0.8	-1.6	
935		-1.3	-1.0	-1.0		-0.8	-0.7	-1.0	
940		-1.8	-0.9	-0.9		-0.7	-0.7	-0.4	
945		-1.6	-0.8	-0.9		-0.7	-0.7	-0.6	
950		-1.3	-0.7	-0.8		-0.7	-0.7	-0.8	
955		-1.0	-0.7	-0.7		-0.7	-0.7	-0.7	
960		-0.5	-0.7	-0.7		-0.7	-0.7	-0.6	
965		-0.5	-0.6	-0.6		-0.6	-0.6	-0.6	
970		-0.3	-0.6	-0.6		-0.6	-0.6	-0.4	
975		-0.9	-0.6	-0.7		-0.6	-0.6	-0.6	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
980		-1.3	-0.7	-0.7		-0.7	-0.7	-0.6	
985		-1.1	-0.7	-0.7		-0.8	-0.8	-0.9	
990		-0.9	-0.8	-0.8		-0.9	-0.8	-1.4	
995		-1.1	-0.8	-0.8		-0.8	-0.8	-0.8	
1000		-1.3	-0.8	-0.8		-0.7	-0.7	-0.4	
1005		-1.0	-0.8	-0.8		-0.7	-0.8	-0.6	
1010		-0.7	-0.9	-0.9		-0.9	-0.9	-0.7	
1015		-0.8	-0.9	-0.9		-0.9	-0.9	-1.1	
1020		-0.9	-0.9	-0.9		-1.0	-1.0	-1.4	
1025		-1.0	-1.0	-1.0		-1.0	-1.0	-1.2	
1030		-1.1	-1.0	-1.0		-1.0	-1.0	-1.0	
1035		-1.2	-1.1	-1.1		-0.9	-0.9	-1.0	
1040		-1.4	-1.1	-1.1		-0.9	-0.8	-1.0	
1045		-1.3	-1.2	-1.2		-0.8	-0.8	-1.1	
1050		-1.2	-1.3	-1.2		-0.7	-0.7	-1.2	
1055		-1.2	-1.3	-1.3		-0.6	-0.6	-0.8	
1060		-1.3	-1.3	-1.3		-0.6	-0.5	-0.5	
1065		-1.3	-1.3	-1.3		-0.5	-0.5		
1070		-1.3	-1.3	-1.3		-0.5	-0.5		
1075		-1.2	-1.2	-1.3		-0.5	-0.5		
1080		-1.2	-1.2	-1.2		-0.5	-0.5		
1085		-1.1	-1.2	-1.2		-0.5	-0.5		
1090		-1.0	-1.2	-1.2		-0.5	-0.5		
1095		-1.2	-1.2	-1.2		-0.5	-0.5		
1100		-1.4	-1.1	-1.1		-0.5	-0.5	-0.6	
1105		-1.2	-1.1	-1.0		-0.5	-0.5	-0.8	
1110		-1.0	-1.0	-1.0		-0.5	-0.5	-0.9	
1115		-1.3	-1.0	-1.0		-0.5	-0.5	-0.7	
1120		-1.7	-1.1	-1.1		-0.5	-0.5	-0.4	
1125		-1.3	-1.1	-1.1		-0.5	-0.5	-0.5	
1130		-1.1	-1.1	-1.1		-0.6	-0.6	-0.5	
1135		-0.9	-1.0	-1.0		-0.6	-0.6	-0.6	
1140		-0.8	-1.0	-1.0		-0.6	-0.6	-0.8	
1145		-0.8	-1.0	-1.0		-0.6	-0.6	-0.7	
1150		-0.8	-1.0	-1.0		-0.6	-0.6	-0.7	
1155		-1.0	-1.0	-1.0		-0.7	-0.6	-0.7	
1160		-1.0	-1.1	-1.0		-0.7	-0.7	-0.6	
1165		-1.2	-1.1	-1.2		-0.7	-0.7	-0.8	
1170		-1.3	-1.3	-1.3		-0.7	-0.7	-1.0	

DESIGN CROSS FALLS

CH	-15.00	-11.25	-7.50	-3.75	0	3.75	7.50	11.25	15.00
1175		-1.4	-1.2	-1.3		-0.7	-0.7	-0.8	
1180		-1.4	-1.2	-1.2		-0.7	-0.7	-0.7	
1185		-1.2	-1.2	-1.1		-0.7	-0.7	-0.8	
1190		-1.4	-1.2	-0.7		-0.6	-0.6	-1.0	
1195		-1.5	-1.2	-0.5		-0.6	-0.5	-1.0	
1200		-1.6	-1.2	-0.3		-0.5	-0.3	-1.2	