|  |  |  |  |
| --- | --- | --- | --- |
| Specific Job Requirements | | Compiled | Type here |
| Job No. | Type here | Verified | Type here |
| Principal Engineer  Date |

# Hydraulic analysis and design

|  |  |  |  |
| --- | --- | --- | --- |
| **Cross Drainage** | **% Probability** | | |
| When designing cross drainage, the Head Water Level should generally be designed to allow 100 mm freeboard to the shoulder, as recommended in the Road Drainage Manual.  However, in difficult situations, immunity Head Water level may be allowed to encroach onto the lane (refer drainage design manual). This applies where floods larger than the design flood could cause unacceptable flooding upstream or damage the road in overtopping. | | | |
| Road Surface Drainage | | | |
| Component | | Average Recurrence Interval | |
| Design (Years) | Check (Years) |
| Gazetted Road | | | |
| Gutters | | 10 | 25 |
| Inlets | | 20 | 50 |
| Table Drains | | 20 | 50 |
| Catch Banks | | 20 | 50 |
| Shire Road | | | |
| Gutters | | 5 | 25 |
| Inlets | | 5 | 50 |
| Table Drains | | 10 | 50 |
| Bridge Decks | | 20 | 50 |
| Intersections | | 20 | 50 |

# Lighting

|  |  |
| --- | --- |
| Intersection Lighting | Route Lighting |
| Type here | Type here |
| Road, Intersection or Cul‑de‑sac | |
| Type here | |

# Design year

|  | Design year\* |  | Design year\* |
| --- | --- | --- | --- |
| Pavement Design | 20 | Temporary Connection | 20 |
| Traffic Lanes | 20 | Traffic Signal Ducting | 15 |
| Intersection Design | 15 | Interchanges | # |
| \* Years after opening to traffic (Consultant to calculate year based on project let for construction six months after completion of design Contract). | | | |
| # Refer Austroads Guide to Road Design Part 4C: Interchanges and local standards. | | | |

# Geotechnical investigation

|  |
| --- |
| Minimum requirements: |
| Soaked CBR tests (1 point) on existing pavement at @ locations. |
| Soaked CBR tests (4 point) on subgrade / insitu material at @ locations. |
| Grading and Atterberg limits on existing pavement (base and sub‑base) at @ m intervals. |
| Grading and Atterberg limits on subgrade / insitu material at @ m intervals. |
| Exploratory pits at @ locations including DCP, Moisture Content, Soil Classification and layer depths. |
| Bridge foundations |
| As per Clause 8.2.2 of the Austroads Guide to Bridge Technology Part 4: Design Procurement and Concept Design. |

# Environmental and Cultural Heritage Management

|  |
| --- |
| **Scope for Cultural Heritage Risk Assessment (CHRA)**  The Consultant shall refer to C7559 Terms of Reference for Cultural Heritage Assessment, which identifies standard requirements for the CHRA.  (Where applicable, add additional assessments to be undertaken as part of the CHRA.)  **Scope for Preliminary Environmental Assessment**  The Consultant shall refer to C7557 Terms of Reference for Preliminary Environmental Assessment which identifies standard assessment requirements for environment as part of planning and options analysis.  The Consultant shall refer to C7559 Terms of Reference for Cultural Heritage Assessment which identifies standard assessment requirements for cultural heritage as part of planning and options analysis.  (Where applicable, add additional assessments to be undertaken as part of the environmental assessment.) |