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City of Greater Geraldton Development Application
Prepared for Leaning Tree Community School Inc
Project 15132 April 2016 v 1

1.0 BACKGROUND & SCHOOL ASPIRATION

This report is in support of an application to the City of Greater Geraldton for planning approval for Private Primary School and High School Site for the Leaning Tree Community School.

The Leaning Tree Community School is an independent school based in Geraldton. The School commenced in 2006, started by a group of parents and community members who had worked for many years prior, to establish a Steiner-inspired primary school to offer a further option for education in Geraldton.

Leaning Tree School has successfully grown and developed, now teaching approximately 75 primary school students, and has up to 30 Playgroup families.

Strategic planning for the LTCS identified the need for acquisition and development of their own school premises to enable continued growth. Importantly, they desired to create a physical environment commensurate with Steiner design principles and a strong emphasis on sustainability principles for the benefit of both the school and greater community. Planning would facilitate a maximum of 160 primary students (single stream K – Yr6) and 60 middle school students (Yr7 – Yr9, single stream) with a maximum class size of 20 students in all years.

The school is currently based at leased premises, however this is a periodic year to year lease only and it is not expected to be renewed beyond 2016. In 2015, Lot 2 Alexander Drive was acquired by the School Board for the site of the new school site.

The School's Mission is:

"We deliver a distinct and contemporary Steiner-inspired education to nurture and develop the whole child. We guide and empower our students to create happy, healthy and meaningful relationships with their world. We provide a rich and diverse environment to enable children to fulfil their potential in all learning areas."

The first school based on Rudolf Steiner's ideas was opened in 1919. Currently there are more than 1000 Waldorf Steiner Schools in 60 countries around the world. In Western Australia there are 6 Steiner Schools.

Rudolf Steiner thought that schools should cater for the needs of the child, rather than the demands of the government or economic forces, so he developed a school model to encourage creativity and free thinking. As such, the goal of Steiner based education is to provide students with the freedom, as much as is possible, to choose and to realize their individual path through life.

The school offers a balanced school curriculum to nurture the whole child, encompassing all developmental areas including social/emotional, cognitive, physical, language and creativity. Education mirrors the stages of a child's development.

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The Leaning Tree Community School has a strong emphasis on creating a sense of community, through sharing, participating and contributing to their community, the greater community, place and the planet.

In addition to self - funding the purchase of the landholding, the Leaning Tree Community School has secured funding from a number of sources including Department of Education Services and Midwest Development Commission to assist with development of the school.

The school will need to apply for an advance determination of the Minister of Education, which will enable to the school to relocate to the new site. Thereafter once operational at the new site, application for re-registration will be required; registration is site specific.

Subject to student number growth and funding availability, the School Board aims to advance with Stage 2 planning and development in approximately 2 years.

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2.0 THE LANDHOLDING

The landholding is known as Lot 2 on Diagram 87978 Alexander Drive and is contained in Certificate of Title 2114/148. The proponent is the Board on behalf of the Leaning Tree Community School Inc

The landholding is located in the Glenfield locality at the intersection of Alexander Drive and Macedonia Drive. The lot is approximately 10 kms from central Geraldton via Chapman Road and North West Coastal Highway. The landholding is 4.05ha in area with frontage of 265m to Macedonia Drive and 143m frontage to Alexander Drive



**Location subject land cnr Alexander Drive and Macedonia Drive, Glenfield
(Source: Google Maps, 2016)**



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The land is generally flat, rising only marginally in an easterly direction between 25m and 30m AHD. See landholding site survey appended to application. The lot is mostly cleared with a small number of vegetation stands across the property. The property has strategic firebreaks on all boundaries.

Both Alexander Drive and Macedonia Drive are sealed roads. Macedonia Drive intersects with North West Coastal Highway approximately 60 metres east of the subject land and 600 metres to Chapman Road. The site is well connected to the existing local road network. Water Corporation infrastructure is located within Macedonia Drive and Alexander Drive. Western Power aerial infrastructure is located in Macedonia Drive. NBN telecommunication is available in the locality.

Adjoining land use is predominantly larger lots ranging in size from 2ha through to 8ha which have historically been used for rural living purposes and some intensive horticulture. The area is in transition, with lower density residential uses becoming more apparent. The larger Glenfield area is identified for, and zoned for urban development and the commensurate range of urban land uses. However, development is likely to be sporadic and over a protracted timeframe, due to the fragmented nature of ownership and limitations to full urban servicing.



**Aerial Photograph Lot 2
Landgate, 2015**

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4.0 DEVELOPMENT PROPOSAL

The proposed Leaning Tree Community School has been designed paying regard to the physical features of the landholding, encumbrances on development and requirement of the school to create a physical environment which is commensurate with the principles of Steiner based education model.

The design acknowledges that the physical environment is a significant part of the educational experience. As a result the proposed site and building design allows for different learning styles and innovative teaching; it reflects the creation of a sense of place and community; is designed for the sustainable use of resources which minimise the impact of the school on the site and community in which it will be located; is designed to be inspiring to staff and students; and the natural environment will form an important part of the design to provide experiential experiences.

Sustainability principles and practice are strong values for the school community. This is evident, not only throughout the curriculum, but in all aspects of school management and the physical school environment. The school has been designed to promote a friendly and welcoming environment, and the physical environment will support many aspects of education programs.

This planning application is for Stage 1 only for the school's primary school development, being kindergarten to Year 6, and playgroup. Expected school population comprises approximately 75 students and 15 staff members. The school class size is maximum 20 children. Class groups are combined.

The proposed school area is contained to a 2.57ha area at the western extent of the landholding as indicated on Plan 15132-01. The school development pays regard to future road reserves and development as indicated on the Glenfield Structure Plan. The school site will have a frontage of 180 metres to Macedonia Drive.



4.1 Site Design

The over-arching objective of the site design is to create a facility that offers a sense of place and reflects the schools aspirations. The design of the site is based on the seashell (spiral) concept, which was developed during early workshops with the school community. It is synonymous with undertaking a journey, growth, and development with an open welcoming gesture. It creates the "heart" of the school.

The architectural inspiration comes from the following elements:

<i>Nature</i>	<i>Organic</i>	<i>Nurturing</i>
<i>Open and welcoming</i>	<i>Low Impact</i>	<i>Sustainable</i>
<i>Warm</i>	<i>Texture</i>	<i>Artistic</i>
<i>Creativity</i>	<i>Surprise</i>	<i>Playful</i>

The original concept devised from workshops is shown in Landwest Plan 15132CON.

Refer Appendix A for examples of other Steiner based school environments in Australia.

Whilst approval is sought for Stage 1 only, the master-plan design is based on future cohesive development over the longer term. The design is centered on an amphitheatre which is intended to be the heart of the school community for gathering and work and play areas.

The entrance to the school site will be from Macedonia Drive which will become the primary frontage for the school. A roundabout will assist with onsite traffic movements. Parking is located at the front of the school, to minimize intrusion of vehicle movements in the school grounds. Parking area encompasses kiss and drop area, and school bus parking.

Access roads internally are restricted to the eastern perimeter of the school area, for visitor parking and accessible parking adjoining administration building. This will minimize vehicle and pedestrian traffic conflict.

The proposed administration block will be readily accessible from parking areas and efficient pedestrian access and provide the entrance to the school built environment. Administration will have its own staff ablutions.

Each node of classrooms will be clustered around a central communal area for that node. The orientation of the classrooms is to ensure cross ventilation can be achieved. The landscaped communal area will house water tanks, composting bins and areas for outdoor work space and play areas.

Whilst each node is designed for particular age groups, all pedestrian paths and movements throughout the classroom precinct are designed to be connected, to ensure connectivity and create sense of belonging and community; that no area is separate from another.



The junior class area will be serviced by an independent and secure play area of approximately 580m², as required by Department of Education guidelines. Outdoor area is to be calculated at 78m² per child. Expected total student numbers of 40 students equates to a minimum requirement of 280m² which is achieved.

Classroom buildings achieve minimum setbacks from each other for fire management guidelines, and suitable setbacks to external boundaries (noting that setback to future boundaries are indicated, after road reserves are created, and not existing external boundaries).

Ablutions are centrally located to the classroom nodes and outdoor areas, to ensure ease of access.

Play areas are indicated where they will have maximum reach for students and provide visual interest to the site. Play areas will be heavily vegetated, and be tactile "hands on" play spaces. They will comprise both passive and active play areas. They have also been designed to have curvilinear configuration, to ensure they transition into the movement network and overall spiral design on site. Play areas and landscaping will be a significant design element of the overall site. See Appendix B for indicative play area designs.

The layout of the school acknowledges that the eastern and southern extent of the school area will be bound by road reserves in the future. As such, the spiral layout ensures there is no "back" of the school and to ensure that future residential development will overlook the school. Building design and placement, play areas and landscaping is intended to ensure that the streetscape offered on these future frontages will also be amenable. Indicative streetscapes are included at 15132-03.

4.2 Built Environment

Administration Building (Refer Landwest Plan 15132-06)

Refurbished transportable buildings. Selection based on short to medium term budgetary constraints. Ideally, administration building in the future may be a building form similar to other buildings on site. Buildings linked by deck area. Deck area covered by roof structure to house solar panels. Indicative FFL notated on Plan Buildings to be painted colourbond "surfmist" or similar to ensure consistency of building colour across site.

Administration building provided with own ablutions and shower facilities for staff. Freestanding, but located in conjunction with administration building: 1 shower; 2 stalls; urinal; 2 wash basins.

Classrooms (Refer Landwest Plans 15132-07, 08, 09)

The school board has selected RAL Building Modules (kit form) for their classrooms. These feature a distinctive curved roof. The curved roof form is an architectural expression of the spiral in the built environment design for the school. The selection

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is also based on being Australian made, efficient construction time for building components, assembly time on site, and cost savings compared to more traditional building forms. The sustainability of RAL buildings was also a significant factor in selection. They use plantation grown timber and other renewable or recyclable components. Energy consumption for production is therefore lower than other buildings of similar size.

The RAL system comprises engineered timber panels joined together to form an arch with external colourbond steel roof and leaf free gutter system (Color: surfmist). Timber base and subfloor with gyprock over. During assembly interior panels are in position for interior design. Eight panels create a single roof and wall entity and the arch form of the buildings. Components are built in the factory, followed by assembly of components on site.

Floor area for all classrooms approximately 75m². Indicative FFL are indicated on plans. Floorplans vary for each group of classrooms, based on the needs of the particular age group, Department of Education requirements, Building Code requirements, and duty of care obligations of the school. The junior classroom will contain its own ablutions in accordance with Department of Education minimum requirements 2 closet pans and 2 washbasins (junior pans).

Classrooms are orientated for maximum cross ventilation and solar passive design. They will visually transition into the physical environment by being placed at varying angles across the site. All colourbond surfaces will be Whitehaven, offering the lowest solar absorbency.

A scale model of the RAL building is demonstrated at Appendix C.



Indicative RAL Module Building

Ablutions (Refer Landwest Plan 15132-10)

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Ablution will be a transportable refurbished building. Buildings to be painted colourbond "surfmist" or similar to ensure consistency of building color across site. Building Code requirements require 1 toilet per 20 children. Based on student population of 75 students and rounding up, minimum requirement of 2 per female, 2 per male plus urinal and 2 basins for each, is achieved. In addition, disabled access facilities provided for each.

Solar pergola/Shade Structure

A timber framed structure will be constructed adjoining the main administration building and grassed play area. This will function both as shade area and also house solar panels.

Temporary Storage Containers

Two shipping containers are proposed for temporary storage while construction is in progress and to be used for storage and workshop until a workshop/storage a facility can be developed on site. The final location will be determined on site by builder. The containers are proposed to be painted with student artwork.

Future Development

Future development (classrooms, workshop, parking, community garden) are indicated to demonstrate an overall school masterplan. All future development is subject to separate planning approvals and timeframes based on school expansion.

4.3 Traffic and Parking

Previously the LTCS commissioned Greenfield Technical Services to undertake Traffic Impact Study. Copy enclosed. The study, including calculations for traffic movements, parking and road network recommendations was based on full school capacity of 220 students in 2023. The report recommends that the traffic impact study be reviewed when Stage 1 of the school development is completed in full and before proceeding with planning for stage 2.

Two crossovers are indicated with defined access and egress facilitating one-way traffic flow on site. Crossover will be 6m wide and sealed between the existing road pavement 6m inside boundary to reduce the migration of material onto the road pavement (see site plan and indicative drainage detail plan) Crossover and culvert with rock bed is proposed, with railing at crossover. Design of crossover subject to engineering design and local authority approval.

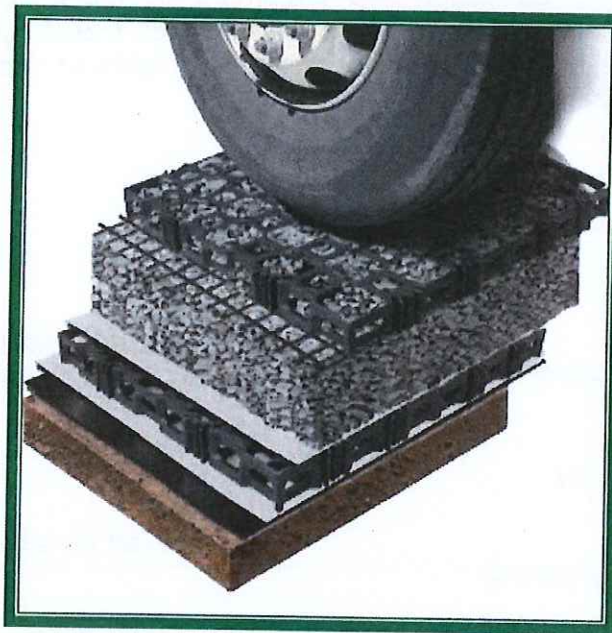
Parking and internal trafficable areas will utilize the Atlantis Cell System (or similar products) with gravel or blue metal infill. The Road cell system structure provides structural strength to porous and/or unstable surfaces suitable for heavy traffic areas. The products are made from recycled polypropylene and road cells achieve



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compressive strength of 130.6 t/m². Detailed specifications for product can be provided on request.



Curvilinear design for the car parking area will assist with reducing vehicle speed. All parking bays will orientate internally, facing a central pedestrian walkway. This is to ensure all pedestrian movements are forward to the walkway which offers connectivity to the greater school area and reduces vehicle and pedestrian traffic conflict. The design also aims to minimize the visual bulk of the parking area at the school frontage and create interest.

Kiss and drop area will be drive through only and designed to ensure exits from car can be left hand side (non-road side) to walkway. This area is separated from bus parking and car bays. Accessible parking and visitor parking is provided adjacent to the administration building and serviced by 6m two way traffic flow. All parking bays will be marked at standard specification with drainage cell system markers as demonstrated on site plan and indicative parking cross section. Bollards and/or vegetation will be used to provide barrier to pedestrian areas as required.

The school is committed to preventing indiscriminate off site parking or access along the Macedonia Drive frontage: a raised landscaped berm area coupled with a roadside swale drain which forms part of storm water management will assist in achieving this, in lieu of fencing or on-street kerbing (see site plan and indicative drainage detail plan). It will be further managed with signage on both sides of Macedonia Drive and school policy/management.

Application will be made to Main Road Western Australia to implement 40km school zone speed limit in time for the school's opening. MRWA may also review the current 80km/hr speed limit based on development.

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Parking Calculations

Based on Department of Education and Training Guidelines, but having regard for Leaning Tree School student population and school travel plan strategies (see below). Rates/ps have been used, as opposed to minimum requirement as this is based on student numbers 400 plus.

Population:

Student	55 FT 20 PT (10 FTE)
	75FTE
Staff	15

Minimum Provision:

Staff/Visitors min 10/100ps inc 3 visitor

Early childhood min 15
(not varied by student no)

Parking min 14/100ps
(includes off-site embayment's)

Universal Access
1 bay for every 30 on-site bays

Actual Provision:

12 inc 3 visitor

15

14 (all on-site, no off-site)

1 (1 additional can be provided in
main parking area as required)

Total

39 plus 1 universal access

**41 plus 1 universal access
or
40 plus 2 universal access**

School Travel Plan Strategies

The Leaning Tree Community School is strongly committed to the development of travel strategies that will reduce the requirement for on-site parking provision and promote and encourage use of more sustainable travel options. Reducing the parking on site is the most effective way to encourage alternative travel arrangements together with the promotion of these strategies to make them the norm, rather than the exception. It also significantly reduces the resources required and cost involved in provision of parking for a relatively short peak period weekdays only.

Strategies already employed, or to be implemented by the school at the new site include (but not be limited to)-

- On site traffic management by school to ensure no-off-site parking and efficient movement internally.
- Due to location at northern extent of the urban area, the school intends on purchasing a 48 seat school bus. This will be used to offer free bus service



with central town pick up and drop off location. This will include a school guaranteed "ride home" backup. All families will be strongly encouraged to utilize this service.

This will reduce car usage and therefore parking to the site. At capacity, this could represent half the student population in a single vehicle movement. This will have greatest positive impact in peak times between 8am and 9am and 2.45pm and 3.30pm. This service also acknowledges that public transport bus services are unlikely to service the landholding in the foreseeable future.

- School will implement data base/noticeboard for car sharing between families together with a school guaranteed "ride home" backup.
- Priority parking on site for car sharers.
- Shower facilities for staff who elect to ride or walk to school.
- Education regarding safe bicycle/walking routes in the locality and road safety programs.
- Secure bike parking on site.

The school will continue to be active in implementation of these strategies and monitor progress so to be responsive to change and introduce new strategies as required.

Internal pedestrian traffic

The proposed pedestrian network is designed to offer a high level of connectivity throughout the site. In the car parking area, all pedestrian movements are proposed to be forward to central walkway to minimize conflict with vehicle traffic. The pathway network is design to connect all areas of the school community and to allow interaction with the physical environment. Natural compacted material swill be used for pathways wherever possible, incorporating drainage cell systems where required to achieve minimum accessibility standards.

4.4 Services

Effluent Disposal

The proponent plans to adopt Aerobic Treatment (ATU) as the primary treatment method for effluent disposal. The system will be designed and maintained in accordance with Health Department guidelines and with maximum capacity 220 persons. The tank system will be located at the southern extent to the school site, suitably setback from future lot boundary. Irrigation field or ETS system located at western extent of Lot 2. The output will be used for irrigation of landscaping and/or grassed play areas (subject to Health Department approval)



Potable Water

Potable water will be provided via connection to Water Corporation reticulated supply. All rainwater runoff from buildings will be captured and directed to rainwater tanks. All facilities will be fitted with min 4 star WELS fittings.

Power

Reticulated power to the landholding will be upgraded to cater for additional load. Application currently in progress with Western Power. However this is expected to be backup source only. A solar system will be implemented progressively, to achieve a total capture area of 210 m² (approximately 135 panels), to supply the equivalent of 35kw.

Telecommunications

NBN infrastructure (fixed wireless technology) is available to the landholding.

4.5 Drainage And Storm Water Management

A sustainable drainage system is one which reduces the impact of development on water drainage by replicating the natural drainage processes to allow for infiltration, evapo-transpiration and groundwater recharge. Drainage strategies to be employed at the LTCS are intended to achieve positive long term environmental and social outcomes. These strategies include the following:

- Storing roof catchments and runoff
- Allow water to soak into ground (infiltration)
- Slowly convey water on surface
- Filter out pollutants

All buildings will capture roof catchments to be directed to rainwater tanks. Runoff calculated as follows:

Roof Area

6 x classrooms	580m ² *
1 x Administration (inc patio & ablution)	155m ²
1 x Ablution	30m ²
1 x Shade Structure	96m ²
Total Roof Area/Impervious	861m²
Volume Required (861 x 0.015)	12.92m³

*Calculation of curved roof catchments

Assume 75% collection due to angle of rain on curved roof

10.7m arc length x 12m length = 128.4 roof footprint

128.4 x 75% = 96.3m²

96.3m² x 6 buildings = 577.8m²



A total collection of 13,000m² will need to be accommodated in rainwater tanks in locations demonstrated on site plan. To manage potential overflow and prevent erosion or scouring, a single soak well will be installed at each classroom with capacity to receive 1.45m² (indicative size 1200x1200).

Across site, there will be no other impervious surfaces, therefore no generation of storm water requiring storage capacity. All access roads, parking areas and walkways will be maintained for all weather access by utilising the Atlantis Drainage Cell system (or similar product) with gravel or blue metal infill or compacted natural materials. This product allows infiltration of storm water and increases permeability of ground areas. Any excess flow will be directed to landscaping.

This alternative to sealed parking areas and access roads has a multitude of benefits including:

- Reducing the volume of storm water runoff, thereby eliminating or minimizing the requirement for storm water drainage system/s.
- Assist recharge of groundwater.
- The sub-base required for cells is equal to or less than the sub-base required for concrete or bitumen.
- More sustainable option and less resource intensive than traditionally sealed pavements.
- Immediate cost saving by reducing traditional storm water drainage systems (soakwells etc).
- Offers a visually softer view of the car parking at the front of the site, it becomes less visually intrusive.

Soil conditions are detailed in the Blacktop Geotechnical Report, appended to the application, and demonstrate highly permeable soil type which has high permeability qualities.

At the property frontage, an existing gully serviced by a culvert pipe. The application proposes to develop the gully into a dry swale with rock bed. Refer indicative drainage cross section and site plan. The dry swale will receive flow from road pavement and hold excess water in event of storm, for filtering of pollutants, infiltration and to convey storm water.

This is contended to be a superior outcome to a traditional drainage ditch, or pit and pipe system which both slow water movement and reduce peak flows. Dry swales are more likely to remove pollutants and sediments, and allow for significant ground water recharge. Water is less likely to pool in dry swales. They are a suitable outcome in low to moderate density areas where storm events are intermittent and are less expensive to build and maintain. Final configuration subject to detailed engineering design.

This option will also be a superior option in terms of visual amenity to the frontage of the school site where it incorporates landscaping within the adjoining property boundary.



The central amphitheatre will also act as a detention basin in the event of significant storm events. The amphitheatre will be designed to retain storm events to limit peak flows and flooding. By holding back runoff, solids can settle which assist with pollutant control and infiltration for ground water recharge. The design of the amphitheatre to receive storm water will need careful consideration to avoid scouring and erosion and damage to amphitheatre infrastructure play areas etc. Final configuration subject to detailed engineering design.

4.6 Landscaping

Landscaping is a significant part of the overall school design and creation of physical environment which offers various learning opportunities and a high amenity school environment.

Landscaping will also form a significant part of the sustainable drainage system for the site, where vegetation plays a significant part in the natural drainage system. Where high levels of infiltration from development are achieved due to permeable surfaces, provides drainage for adjoining landscaped areas.

Treated output from the ATU system will be used to irrigate landscaping. Where evaporative trenches are used, they will be used in conjunction with plantings. Alternatively, it may be used for irrigation of grassed play areas, supplemented by other sources.

Landscaping will be used to create substantial vegetation buffers/screening of development and to define nodes of development, walkways, parking areas and soften the visual appearance of the development in the landscape. Vegetation will be used to provide shade and wind protection. Landscaping will also assist with control of soil erosion, and stabilising runoff.

Existing mature trees will be retained on site, and new landscaping will be with species endemic to the area.

At detailed design stage, the civil engineer and landscape architect will work together to design and achieve integrated water drainage whilst ensuring land is available for intended function/s.

4.6 Other

Security

The school will employ passive security measures to avoid need for fencing or other structures. This will include use of a monitored CCTV system.

Signage



School signs will be required at the entrance to school, as well as onsite directional and occupational health and safety signage. Signage will be constructed in accordance with Local Planning Policy.

Fire management

Management and suppression to be in accordance with local authority requirements and relevant legislation. The landholding is adjoining a bushfire prone area. A Fire Management Plan may be required which considers strategic fire breaks until such time as adjoining road reserves are developed. The closest fire hydrant is located on Alexander Drive approximately 150m from the middle of the school frontage. Hydrant testing will be required to be undertaken.



Extract of Map of Bush Fire Prone Areas, 2016

Rubbish Removal

Minimal rubbish generation is expected from school operations due to recycling, re-use and composting programs conducted on a whole of school basis. Composting bins are to be provided at each classroom node, and central recycling collection points are provided.

The proponent will be required to negotiate with the local authority regarding the provision of rubbish collection services as required.



Delivery and Storage Areas

All deliveries will be to administration building. Parking is available either at the adjoining parking area, or main parking area. Storage will be provided in storage containers, as detailed previously.

Construction Works

At issue of development approval, building permits will be lodged with required certification. Site works and construction are expected to commence approximately August/September 2016. The project manager will ensure management of construction impacts on adjoining landholdings and road network (particularly dust).

Where works will be required during summer months during construction moratorium period/s, the project manager will seek necessary approvals from local authority with required mitigation measures.

It is intended that the school will open for the beginning of the 2017 school year.

Building Permit/s

Separate building permit applications will be required to be sought for all new development. The final detailed design, FGL, and FFL including requirement for site works will be determined at building permit stage, including consideration of conditions imposed on any planning approval/s.



5.0 SUSTAINABILITY PRINCIPLES

The proposed school development offers effective environmentally sustainable design. This leads to increased environmental benefits and major resource savings. In summary, the following sustainability elements are incorporated into the development.

1. **Indoor Environment Quality:** access to natural and ventilation reduces need for artificial lighting, cooling and heating. Large windows give access to external views. Waste recycled.
2. **Energy Efficiency:** solar passive design, monitor power meter, energy demand reduction strategies; high green star energy rating for buildings, onsite electricity generation
3. **Water Resources:** minimize water demand, monitor water meter; water capture; water wise garden/landscaping design; irrigation by collected water or treated effluent; WELS fixtures
4. **Stormwater Management:** highly permeable surfaces to maximize infiltration and groundwater recharge; roof catchment collection; minimal use of on-site drainage infrastructure (soakwells); water sensitive design
5. **Building Materials:** use of sustainable building and construction products; re-use refurbished buildings; use of recycled materials; minimise building waste at time of construction by re-use; use of natural materials.
6. **Transport:** travel strategies; minimise provision of car bays; school bus service; providing secure bike storage; providing access to showers; car sharing; safe travel routes.
7. **Waste Management:** minimize waste at building construction phase by re-use of materials; composting and recycling stations and storage areas.
8. **Ecology:** retain all existing mature trees; use of endemic vegetation in landscaping; retain top soil; use of natural materials; vegetation corridors for movement of fauna
9. **Innovation:** building form and design; stormwater management and products; transport/travel strategies; design; community outcomes



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6.0 ENGAGEMENT WITH COMMUNITY

The Leaning Tree Community School is committed to working with their neighbors and greater community. To this end, they have invited adjoining landowners and residents in the greater locality to their "Day on the Land", to be held in June. This is to provide an introduction to the School and its philosophy, to answer questions about the school infrastructure, and to create a sense of community. A copy of the invitation and correspondence forwarded to residents is appended to the application.

7.0 CONCLUSION

The proposed school development will enable the Leaning Tree School to continue to expand their current facilities, but on their own purpose built site, which will embrace the design principles and the philosophy of the school. Whilst the proposed school development will be ahead of full urban development, the school population does come from further field than Glenfield and it will continue to provide another option for primary school education in the Geraldton area.

The application demonstrates that the school design and sustainability outcomes are innovative and achievable without compromising school function.

We look forward to your determination. Please do not hesitate to contact our office with any further queries.

Yours faithfully

Gail Bermingham

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