

OFFICE COPY

17 March 2020 - Attachment 8.1.1a

RECEIVED
 26 JUN 2019
 State of Denmark



PROPOSED LEASE BOUNDARY 1:750 © A3
 Job no. 1041
 DENMARK RIVERSIDE CLUB PROJECT
 South Coast Hwy, Denmark WA 6333

ptx
 architects

| | |
|-----|----------|
| REV | 09.10.14 |
|-----|----------|

Denmark MUNICIPAL HERITAGE INVENTORY

level of significance

Considerable

John Clark Memorial Bandstand



Place Details

| | |
|--------------------------|-------------------------------|
| Place Name: | John Clark Memorial Bandstand |
| Other Name: | |
| Place Type: | Bandstand |
| Original Use: | Bandstand |
| Current Use: | Bandstand |
| Reserve No.: | 39066 |
| Lot/Location No.: | Lot 1002 |
| Address: | Bambrey Road |
| Locality: | Denmark |
| Map Reference: | |
| HCWA Number: | |
| ASS Number: | 3188 |

Description:

| | |
|-------------------|-------------------------------------------------|
| Walls: | Brick |
| Roof: | Castellated steel beams with corrugated iron |
| Condition: | Good |
| Integrity: | All |

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The Bandstand is situated on the eastern bank of the river, opposite the Hotel and Esplanade. The stand has a commanding presence as it has a cantilevered roof that projects over the water, creating an interesting reflection. The roof is supported by two steel beams. The beams are anchored to the bank and supported on two masonry columns. They project up to 28ft at an angle from the columns.

History

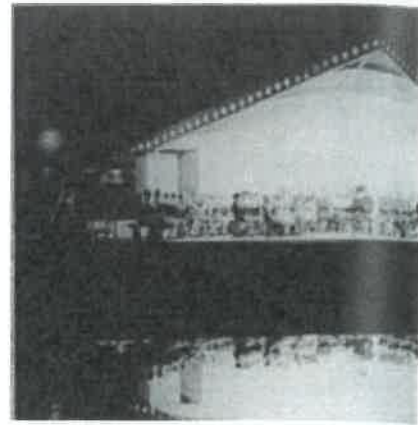
Construction Date: 1964
Architect: Forbes & Fitzhardinge
Builder: ND Thornton

Significance

Historic Theme: Community Efforts
Sub Theme: Entertainment

The John Clark Memorial Bandstand has aesthetic, social and historic heritage significance.

John Clark was born in Scotland in 1879. He came to Denmark in 1908 where he took up farming until the 1920s. In 1927, after being granted a hotel licence, he built the Denmark Hotel which he and his wife operated for a number of years. In 1940 he built Edinburgh Guest House. Mr Clark had played in a band in Scotland as a child. In his will he left £2,000 to the Shire of Denmark which then decided to allocate these funds to the Denmark P&C Association during the 1960's to purchase instruments for a Silver band (the John Clark Memorial Silver Band, the first school band in WA). He also donated £2,000 to the then Denmark Road Board to build a bandstand on the small reserve opposite the Catholic Church (John lived in one the houses on the other side of this park). The Shire Clerk FW Timothy discussed this matter with Council and was authorised to negotiate with the Perpetual Trustees as Executors of John Clark's Will, and with his son and daughters, to change the location of the proposed building as everyone agreed the designated site was most unsuitable. The Trustees and Family agreed to have the bandstand erected on the eastern side of the river so that the western side could be used as an auditorium. At this time the Esplanade was in a very poor state – no toilets or facilities of any kind and the Council had not money to provide them. Funds were available from the Tourist Development Authority to erect toilets but Council had to provide \$1 for every \$2 granted. Through careful negotiations it was arranged that money spent on the Bandstand could be used as Council's share of funds to erect toilets on the Esplanade and the town benefited in two ways from the legacy. The Esplanade opposite the bandstand was terraced and grassed to provide seating for audiences. Unfortunately over time this has been neglected and now does not exist. Both buildings were erected by ND Thornton. In 2014, remedial works were undertaken to the roof and foundations for structural integrity purposes.



Opening day of the Bandstand on the 29th February 1964.



Level of Significance

Considerable

Very important to the heritage of the locality. High degree of integrity/ authenticity. Conservation of the place is highly desirable. Any alterations or extensions should reinforce the significance of the place.

Supporting Information

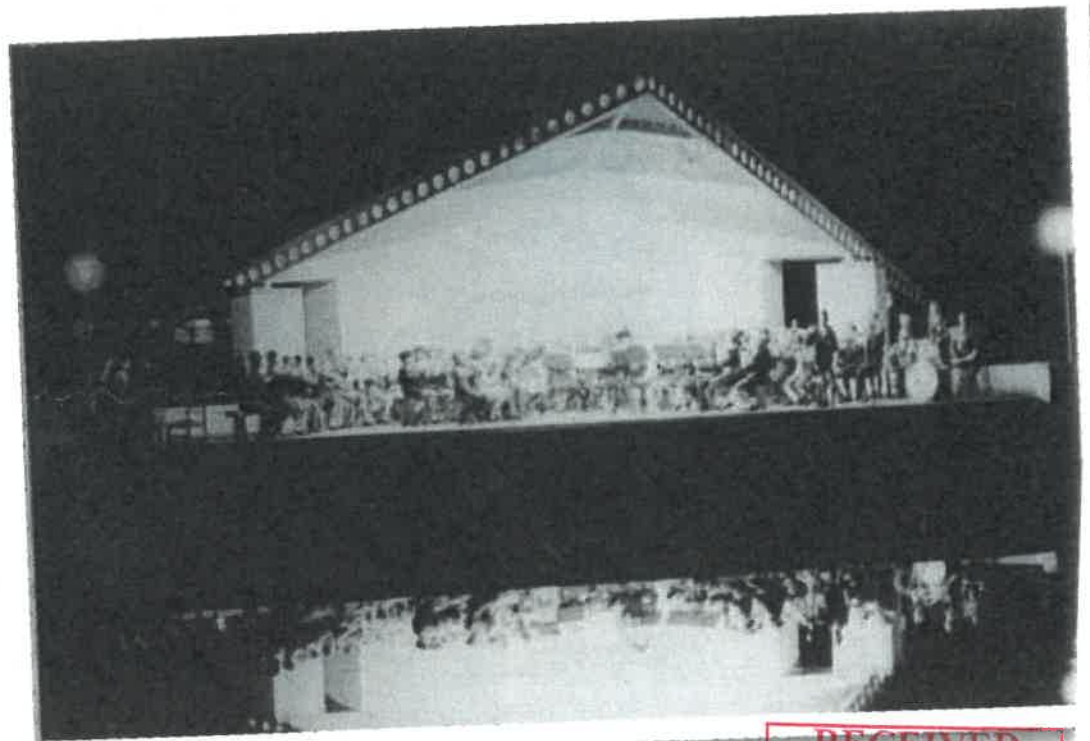
Newspaper articles:

The West Australian 17 November 1962, p 21

The West Australian 29 February 1964, n.p.

Previous Listing

Assessment Date 1999



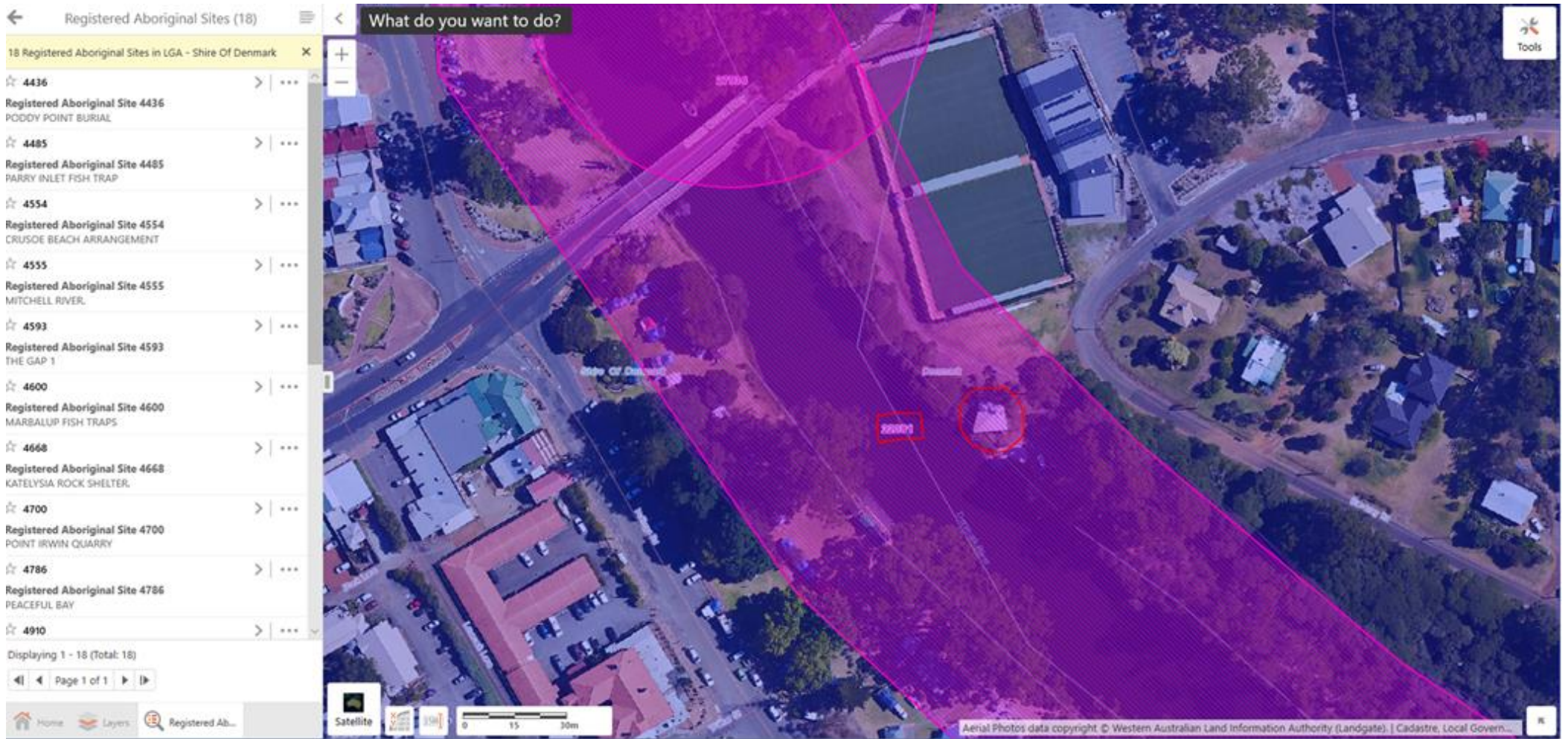
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Shire of Denmark
TOWN

APPENDIX VII - SCHEDULE OF PLACES OF HERITAGE VALUE

| No. | Name | Address |
|-----|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1 | Bankwest | 77 Strickland Street |
| 2 | Berridge Park | Hollings Road |
| 3 | Bowling Club | Reserve 20403, Morgan Road |
| 4 | Clanwilliam | South Coast Hwy, Nornalup |
| 5 | Country Women's Association Rest Rooms | Reserve 22410, Mitchell Street |
| 6 | Craig's Building | 66-70 Strickland Street |
| 7 | Denmark Agricultural College | Reserve 26565, South Coast Hwy |
| 8 | Denmark District High School | Reserve 21020, Mitchell Street |
| 9 | Denmark Pre-Primary, Unit 1 | Pt Reserve 37516, South Coast Hwy |
| 10 | Denmark Public Cemetery | Reserve 11655/Loc 7478, South Coast Hwy |
| 11 | Denmark River Railway Bridge | Reserve 41815, Cnr Hollings Road/Inlet Drive |
| 12 | Denmark River Traffic Bridge | South Coast Hwy, Denmark |
| 13 | Devon and Cornwall Group Park | Fernley Road |
| 14 | (a) District Hospital "-specifically the mortuary and the matron's quarters" (b) Peace Tree | Peace Street Reserve 18587, Cnr Horsley/Scotsdale Road |
| 15 | Disused Railway Reserve and Bridges | Denmark - Nornalup Railway |
| 17 | Former Headmaster's House | 4 Brazier Street |
| 18 | Group Settlement House (Parryville) | Loc 5420 Pates Road |
| 19 | Harewood Forest | Scotsdale Rd, 8 km from Denmark |
| 20 | House | 12 Welsh Street |
| 21 | House | 24 Price Street |
| 22 | House | 44 Hollings Road |
| 23 | House | 61 South Coast Hwy |
| 24 | House | 90 Strickland Street |
| 25 | House | Lot 908 South Coast Hwy |
| 26 | Jackson's Place | Pt. Loc 2071 Howe Road |
| 27 | John Clark Memorial Bandstand | Reserve 39066, Denmark River Foreshore |
| 28 | Karri Trees | (a) Both sides of South Coast Hwy, eastern approach (b) South Coast Hwy, western approach (c) Lights Road |
| 29 | Kentdale Hall | Reserve 27490, Park Road, Kenton |
| 30 | Moreton Bay Fig Tree | Lot 36 Strickland Street |
| 31 | Old Butter Factory | Lots 231 & 232 North Street |
| 32 | Old Police Station | Reserve 42278/Loc 1021, Mitchell Street |
| 33 | Old Post Office | Reserve 30227/Lot 952 Cnr Inlet Drive and Crellin Rd |



Aboriginal Heritage Inquiry System extract- DA2019/79 John Clarke Memorial Bandstand

A3188

1CR19858743



Home to:-
Denmark Bowling Club
Denmark Dragon Boat Club
Denmark Classic Boat Assn Inc
Denmark Canoe & Kayak Club

PO Box 48, Denmark, WA 6333
Phone 9848 1517
www.denmarkriversideclub.org.au
1Riverside16@gmail.com

Director Assets & Sustainable Development
Mr. David King

David, thank you for the opportunity to comment on Councils Resolution (090619).

Referral: - Proposed Demolition of John Clarke Memorial Band stand _ Portion of reserve 39066, No 2 (lot 1002) Bambrey Road, Denmark.

As the Lessee of the portion of Reserve 39066 we have been requested to consider and comment on the above proposal.

With reference to the Lease Document clause 14.2 Abatement, this condition has been implemented by the Shire of Denmark and we thank you for that.

The Band Stand initially offered our Dragon Boaters and Kayakers the convenience of toilet facilities and a small storage facility. Due to the unsafe condition of the Band Stand we have relocated our equipment to the main Club House Building as well as utilizing the Club ablution facilities and therefore have no ongoing requirement of the Band Stand.

As to the demolition or otherwise of the John Clarke Memorial Band Stand, the Denmark Riverside Club respects the decision of Council (Resolution 090619).

With regards to part 1 of Councils Resolution (090619), receiving the report on Riverside Stage 2 – Recreational Power Boat & Foreshore Usage Study 2013-2017- John Clarke Memorial Band Stand and Boat Launching Facility.

The Riverside Club is keen to assist the Shire Council, as best as our resources will allow, in developing a safe access and egress to the Denmark River at the current site utilized by our Dragon Boat and Kayak Members.

The access and egress area, is unsatisfactory and certainly not in the long term, beneficial to the environmental well fare of the River foreshore. A total upgrade is required to make this area of accessing the River safe.

This is possibly the right time to look at a temporary solution of access to the river via a floating pontoon or similar structure until the implementation of Stage 2. We fully understand that there will be environmental and cultural issues associated with such a proposal but it would be beneficial for all concerned.

Once again thank you for the opportunity to comment on Councils Resolution (090619).

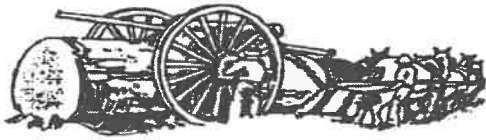
Kind Regards

A handwritten signature in cursive script that reads "Ken Richardson-Newton".

Ken Richardson-Newton

President

Denmark Riverside Club (inc.)



Denmark Historical Society Inc

9th August 2019

Mr David King
Director, Assets and Sustainable Development
Shire of Denmark WA

Dear David,

Re: Demolition of the John Clark Memorial Bandstand – Portion of Reserve 39055, No. 2 (Lot 1002) Bambrey Rd, Denmark.

Comments from the Denmark Historical Society Inc (DHS)

Thank-you for the opportunity to comment on this issue.

As has been noted before this is a divisive issue and members of the DHS have a wide range of views. At a recent special meeting called to discuss the issue members had the opportunity to discuss their views.

A number of members strongly expressed the view that the bandstand was a Denmark Icon and that many members of the community had a very strong attachment to it. Their preferred outcome was the rebuilding of the bandstand in the same location, with better protection from high water levels and an effort to make it more multipurpose so it got more use.

Some members suggested a simple rotunda type structure on the same side of the river, but in a location where it would not be affected by high water levels.

Others suggested a similar structure or an improved 'sound shell' in a more useable location, such as Berridge Park or Kwoorabup Community Park, with the latter less supported because of potential flooding issues, and noise issues with the proximity of the hospital.

One thing agreed by all was that whatever the new structure it should carry John Clark's name and a plaque commemorating the original bandstand. If there is no alternative to demolition without rebuilding members felt that a rotunda structure named in honour of John Clark, in a nearby location was essential regardless of whether a new bandstand/performance stage was built elsewhere.

We would appreciate the Council keeping us informed during the planning process for any new memorial to John Clark.

We thank the Council for suggesting that the DHS might retain some part of the original bandstand.

Members felt that the only material we could realistically retain was the lettering commemorating John Clark.

Yours sincerely

Ashleigh Murch

16 Mitchell St Denmark WA
<http://denmarkhistoricalsocietywa.org.au>

PO Box 54 Denmark WA 6333
info@denmarkhistoricalsocietywa.org.au

Chairperson, Denmark Historical Society



Department of **Planning,
Lands and Heritage**

Your ref: A3188 (2019/79)
Our ref: 14322/45681
Enquiries: Katie Davies (08) 6552 4638

Chief Executive Officer
Shire of Denmark
enquiries@denmark.wa.gov.au

Attention: Annette Harbron

Dear Sir

JOHN CLARKE BANDSTAND

Thank you for your letter of 1 July 2019, regarding the proposed development at 2 Bambrey Rd, Denmark. The place is listed on the Shire's Municipal Inventory.

We thank you for the opportunity to provide comments on the proposed development. However, as the place is not in the State Register of Heritage Places, is not subject to a heritage agreement, and is not identified as a place warranting assessment by the Heritage Council, we decline to provide comment.

Should you have any queries regarding this advice please contact Katie Davies at katie.davies@dplh.wa.gov.au or on 6552 4638.

Yours faithfully

A handwritten signature in black ink, appearing to read "Harriet Wyatt".

Harriet Wyatt
A/ Director Heritage Development

16 July 2019

Jasmine Tohill

From: [REDACTED]
Sent: Friday, 6 September 2019 4:01 PM
To: Jasmine Tohill
Subject: ICR19959295 - Proposed Demolition of John Clark Memorial Bandstand - Portion of Reserve 39055, No.2 (Lot 1002) Bambrey Road, Denmark (A3188)

SynergySoft: ICR19959295

Hi Jasmine,

Tristan has asked that I respond in regards to approvals regarding Aboriginal Heritage. I note that the removal works do intersect with the boundary of Aboriginal site ID 22081 (Denmark River), however not the waterway. A review of the site file indicates a buffer was placed on the boundary (30 metres either side of the river). Your works are within this buffer zone, consequently no approvals are required under the *Aboriginal Heritage Act 1972*. If your works change and they impact the waterway please seek advice further advice.

Regards,

Matthew Franklin | Team Leader | Heritage Operations
Globe Building, 497 Wellington Street, Perth WA 6000

[REDACTED]
www.dplh.wa.gov.au



The department is responsible for planning and managing land and heritage for all Western Australians – now and into the future

The department acknowledges the Aboriginal peoples of Western Australia as the traditional custodians of this land and we pay our respects to their Elders, past and present.

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This notice should not be removed.

KEVIN LODGE ENGINEERING

**Kevin Lodge MIEAus.CPEng.
3 Pember Rd E,
Denmark 6333
Ph/Facs 9848 2790
6th Feb. 2019
Job 690-1/19
Page 1 of 5**

**Clint Daw
Coordinator Assets and maintenance
Shire of Denmark
PO Box 183
Denmark**

**REPORT; JOHN CLARKE MEMORIAL BANDSTAND
STRUCTURAL INTEGRITY & OPTIONS FOR FUTURE TREATMENT**

GENERAL CONDITIONS

The building was inspected on the 22nd January 2019.

The building was constructed 1963-4.
Known remedial works – lower part of beams near the ground were re-painted, & new concrete footing caps were placed, in ~2014.

The structure is shown in scale drawings attached. The current state of the building is outlined below.

17 March 2020 - Attachment 8.1.1e

BUILDING COMPONENTS & CONDITION

| No. | COMPONENT | CONDITION | TREATMENT |
|-----|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Roof cladding RC – Trimdek zincalume | Acceptable | <u>Would be replaced</u> as a part of any future works. |
| 2 | Roof beam south – RBS. 405mm deep Castellated steel U beam. | Nearing Failure due to advanced rusting. Capacity not readily assessible. | <u>Replace</u> with similar. – a newly fabricated beam should be hot dipped galvanized. This major element is beyond repair. |
| 3 | Roof beam north – RBN. 405mm deep Castellated steel U beam. | Nearing Failure due to advanced rusting. Whilst not deteriorated as far as RBS, it's capacity is not readily assessible. | <u>Replace</u> with similar. – a newly fabricated beam should be hot dipped galvanized. This major element is beyond repair. |
| 4 | Roof beam south – brick pier [590x 1070] support - PS | Acceptable | Retain |
| 5 | Roof beam north – brick pier [590x 1070] support - PN | Acceptable | Retain |
| 6 | Roof beam south – concrete pad footing - PFS | Acceptable | Should the beam [RBS] be replaced, then this PFS <u>would be replaced</u> , requiring re-engineering of it's size, and the tie-down fixing to a substitution of a baseplate [galvanized] to the end of the beam. |
| 7 | Roof beam north – concrete pad footing - PFN | Acceptable | Should the beam [RBN] be replaced, then this PFS <u>would be replaced</u> , requiring re-engineering of it's size, and the tie-down fixing to a substitution of a baseplate [galvanized] to the end of the beam. |
| 8 | Stub col & baseplate [steel] supporting beams at Pier South. - SCS | Failed, due to excessive rusting. | <u>Replace</u> . New stub-column & baseplate will be part of the new RBS [all HDG]. New plate will be of a greater dimension, to allow for drilling into the concrete capping and epoxy fixing new bolts. |
| 9 | Stub col & baseplate [steel] supporting beams at Pier North. - SCN | Failed, due to excessive rusting. | <u>Replace</u> . New stub-column & baseplate will be part of the new RBN [all HDG]. New plate will be of a greater dimension, to allow for drilling into the concrete capping and epoxy fixing new bolts. |

| No. | COMPONENT | CONDITION | TREATMENT |
|-----|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | Intermediate roof purlin, 150UB – east - PE | Acceptable – because it is a minor member. | <u>Retain</u> . Sandblast, weld on lapping plates at deeply rust sections, paint with Marine grade epoxy, or HDG. OR replace with new member similar size, HDG. |
| 11 | Intermediate roof purlin, 100RSJ – west - PW | Acceptable – because it is a minor member. | <u>Retain</u> . Sandblast, weld on lapping plates at deeply rust sections, paint with Marine grade epoxy, or HDG. OR replace with new member similar size, HDG. |
| 12 | Ridge tie – timber 200 x 50 hardwood, bolted to PE & PW - RT | Acceptable | Re-use if other members replaced. |
| 13 | Gable cladding [plywood over timber frame] above internal brick wall - GC | Acceptable | <u>Replace missing pieces</u> at southern end. |
| 14 | Brickwork – change rm south. BWS | Acceptable. However, some [minor] deterioration due to rising damp – behind front door near floor. A crack [minor] over the same front door. | Retain |
| 15 | Brickwork – change rm north. BWN | Acceptable | Retain |
| 16 | Concrete pave, sections separated by joins - riverside | Sections have moved unevenly vertically & laterally. Some edge parts have cracked. | <u>Replace</u> . Excavate 500mm below and replace with clean compacted sand. Place new slabs over. |
| 17 | Concrete pave roadside & steps | Acceptable | |
| 18 | Remedial columns south ColS 100 shs Duragal | Acceptable, except the bottom 400mm & baseplate have lost their galvanizing & are rusting following annual inundation at flood level, prior to the opening of the inlet mouth. This is not a long-term solution as the concrete paving slab the baseplate is fixed to, will continue to settle, pulling down on the column, and further load the RBS above. | Maintain until a roof structure replacement is introduced. |

| No. | COMPONENT | CONDITION | TREATMENT |
|-----|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 19 | Remedial columns north ColN 100 shs Duragal | Acceptable, except the bottom 400mm & baseplate have lost their galvanizing & are rusting following annual inundation at flood level, prior to the opening of the inlet mouth. This is not a long-term solution as the concrete paving slab the baseplate is fixed to, will continue to settle, pulling down on the column, and further load the RBN above. | Maintain until a structural replacement is introduced. |
| 20 | Remedial beam support/tie down [20x130 steel bar, 2M16], 2 at South pier.TS | Acceptable | Maintain until a roof structure replacement is introduced. Their performance as a support &/or tie-down may not be adequate. |
| 21 | Remedial beam support/tie down [20x130 steel bar, 2M16], 2 at North pier.TN | Acceptable | Maintain until a roof structure replacement is introduced. Their performance as a support &/or tie-down may not be adequate. |

NOTES;

1. HDG – hot dip galvanized to 400g/m².

CONCLUSION – main features.

1. The steel castellated roof beams, RBS [most severely rusted, because it is exposed to southerly rainy, salt laden, weather] & RBN have rusted beyond repair. Replacement of both is required.
2. Stub columns & baseplates SCS & SCN, have rusted beyond repair. These are welded onto the roof beams, so are an integral part of them. Replacement of both is required.
3. Brickwork piers PS & PN, are good condition – acceptable to retain.
4. Brickwork to changerooms BWS & BWN, are good condition – acceptable to retain.
5. Concrete pavement riverside – has settled & shifted, so should be re-built.
6. The annual inundation [prior to inlet mouth opening] has adversely affected the riverside concrete pavement, but not the other brickwork.
7. **BEST CASE SCENARIO – all of below within 2 years [commenced by Feb 2021].**
 - **is to replace the roof steelwork members, with new replicated and galvanized items.**
 - **install new member fixings – galvanized.**
 - **install new roof cladding. Whilst the cladding is currently acceptable, replacement would normally be done following an upgrade of the steel structure.**
 - **retain the brickwork.**
 - **Replace riverside concrete paving, including re-building the subsoil 500 deep under.**
 - **All of this work has an estimated cost of \$89,213 gst incl.**
 - **In the event of a roof replacement, some engineering design input will be required as the new beams may vary [in steel Grade & dimensions] from the original, and their fixings will vary. The estimated cost of this is included in the figure above.**

SCHEDULE OF REMEDIAL WORKS

| ITEM | SCHEDULE | REMEDIAL WORKS |
|-------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Recent remedial work 2014 – the installation of ColS & ColN, and support/tie-down bars TS & TN. | Feb 2019 [current] | Maintain current exclusion barrier [plastic] and notice. Access to change rooms is acceptable. |
| Upgrade exclusion – if demolition or replacement of the roof is not done. | Feb 2020 [1 year from this report] | Install Builders steel mesh fence excluding access to that area under the riverside canopy. Access to the changeroom is acceptable. |
| Commence demolition or replacement of the roof. | Feb 2021 [2 years from this report] | Demolish or replace the roof structure. |



Regards, Kevin Lodge

Attach 1; scale drawings [2 of A4]

Attach 2; Photos [2 of A4]

Attach 3; Cost estimate of Roof Replacement [2 of A4]

Attach 2; PHOTOS - JOHN CLARKE MEMORIAL BANDSTAND Jan 2019



RBS – Roof Beam South



SCS – Stub columns South



RBN – Roof Beam North



SCN – Stub columns North [western view]



SCN – Stub columns North [eastern view]



West Elevation - brickwork



Eastern Elevation - brickwork



North east Elevation – Pad footing PFN, to Roof beam RBN



South east Elevation – Pad footing PFS, to Roof beam - RBS

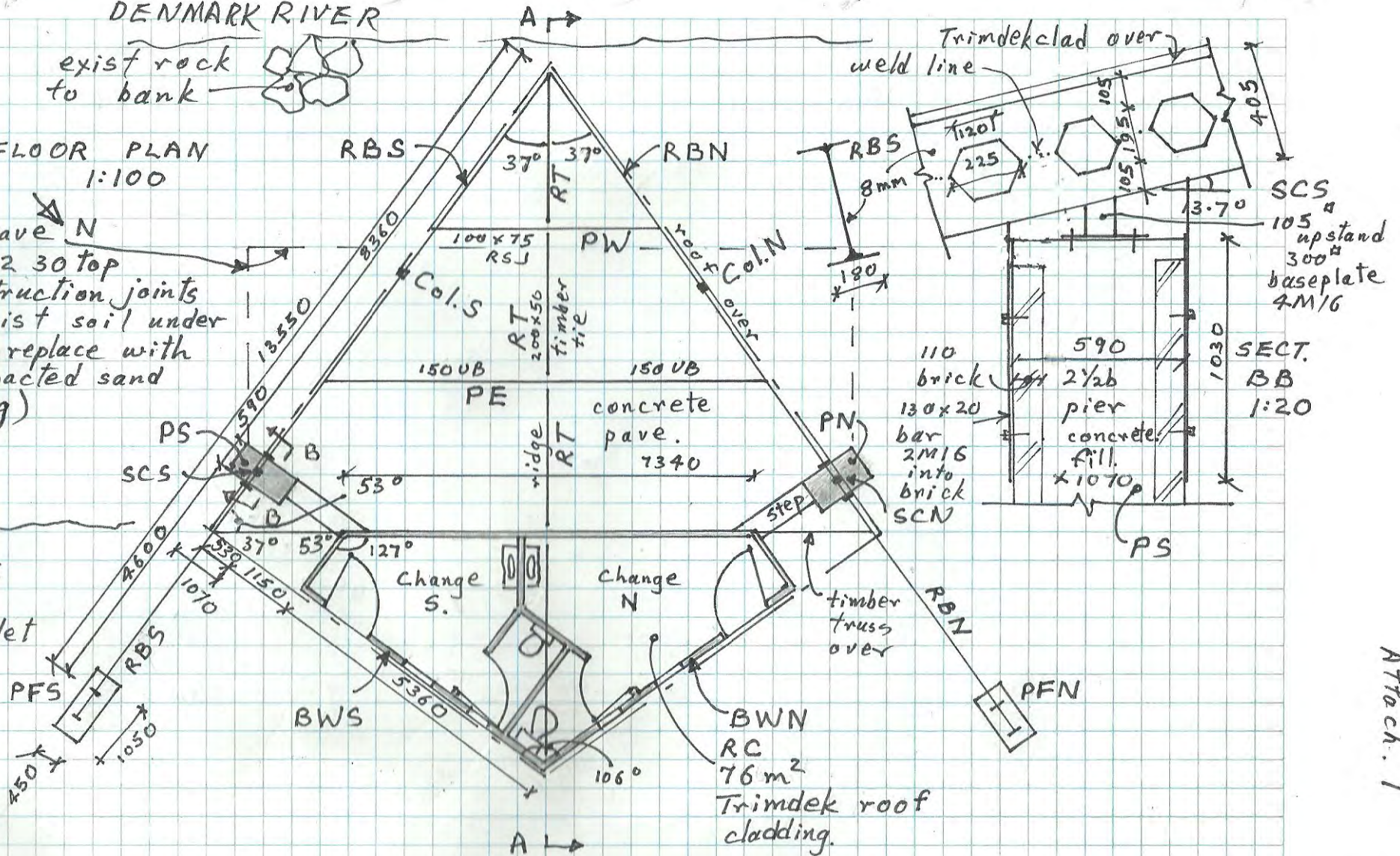
DENMARK RIVER

exist rock to bank


FLOOR PLAN
1:100

Concrete pave N
100 mm SL72 30 top
with construction joints
Remove exist soil under
500 deep & replace with
clean compacted sand
(if replacing)

Extent of
inundation
prior to inlet
opening.



BAMBREY ST


 Kevin Lodge
 MIEAust CPEng
 Chartered Professional Engineer
 Membership No. 628957
 The Institution of Engineers, Australia

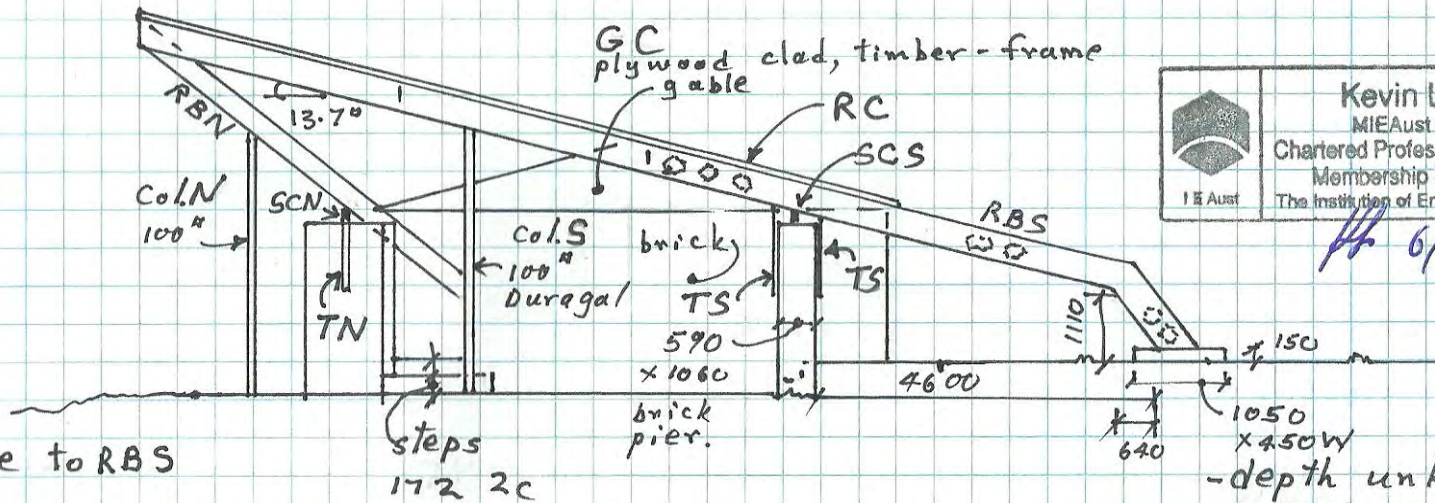
6/2/19

John Clarke
 Memorial
 Bandstand
 Feb. '19
 Khodge MIEAust

Attach. 1

1/2

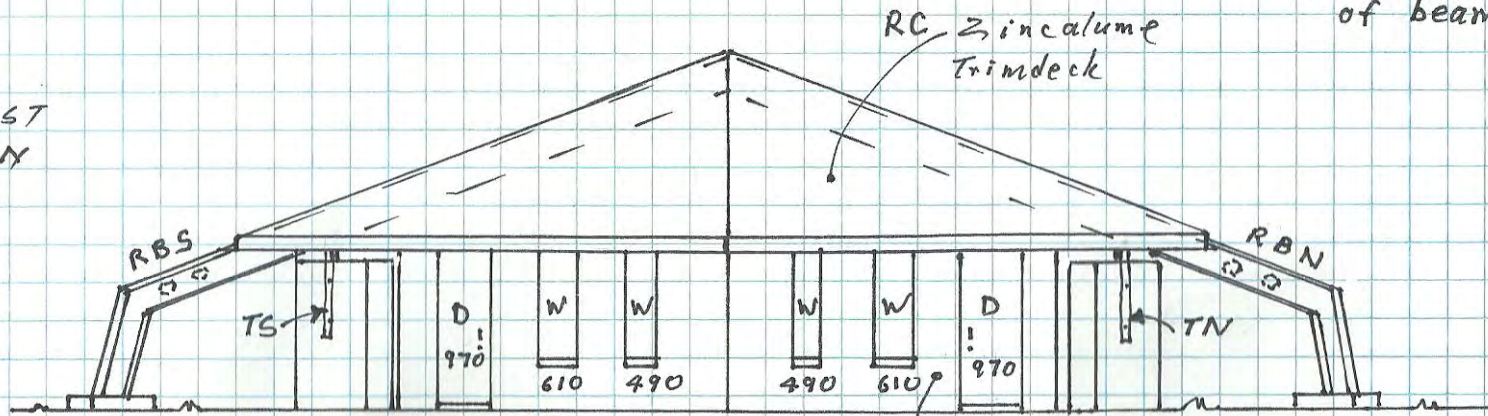
SOUTH ELEVATION
1:100 - square to RBS



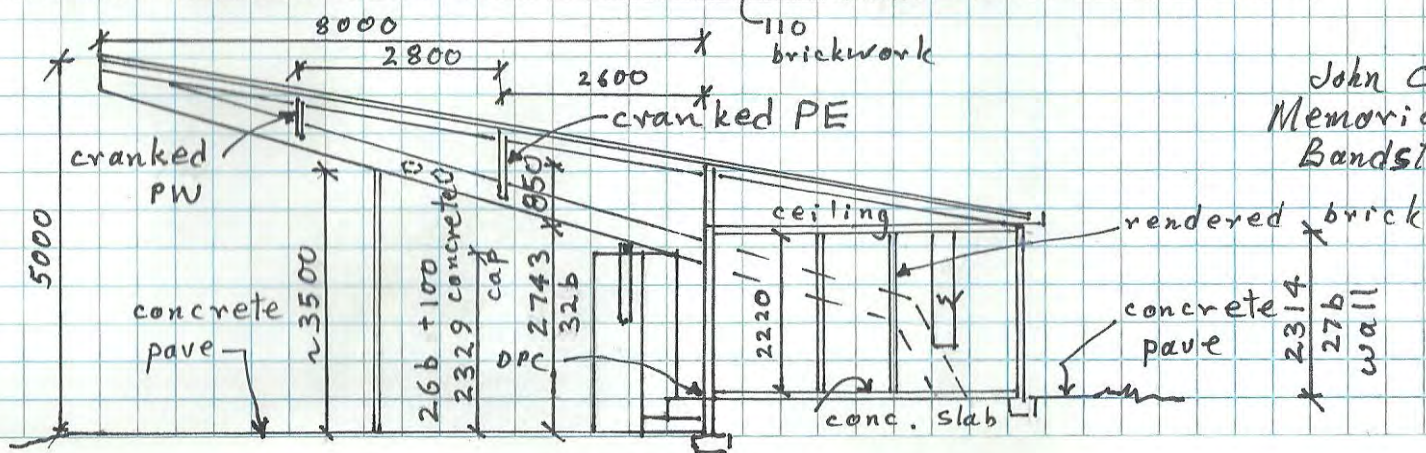
Kevin Lodge
MIEAust CPEng
Chartered Professional Engineer
Membership No. 628957
The Institution of Engineers, Australia

6/2/19

NORTH EAST ELEVATION
1:100



SECTION AA
1:100



2/2

Bandstand Roof Replacement & misc related items

COST ESTIMATE

1

Shire of Danamrk

6 Feb

2019 (update)

| No. | Item | | Qty | Units | Rate | Amount | |
|---------------------------------|--------------------------------------|------|-------------|--------|------|----------|----------|
| 1 Steelwork material | | | | | | | |
| | No. | rate | Q | | | | |
| | beams | 2 | 16 | 32 | Lm | \$165 | \$5,280 |
| | stub col | 2 | | 2 | ea | \$125 | \$250 |
| | & baseplate | | | | | | |
| | PE 150UB | 1 | | 9 | Lm | \$33 | \$297 |
| | PW 100UB | 1 | | 5 | Lm | \$30 | \$150 |
| | fix plates | 11 | | 11 | ea | \$49 | \$539 |
| | bolts M16 | 20 | | 20 | ea | \$6 | \$112 |
| | bolts M12 | 8 | | 8 | ea | \$5 | \$36 |
| | misc | | | 1 | ea | \$179 | \$179 |
| | Trimdek | | | 76 | m2 | \$19 | \$1,444 |
| | trims | | | 30 | Lm | \$4 | \$113 |
| | transport | | | 1 | ea | \$1,770 | \$1,770 |
| | Sub total this item | | | | | | \$10,170 |
| 2 Steelwork fabricate | | | | | | | |
| | No. | rate | Q | | | | |
| | beams | 2 | 5700 | 1 | ea | \$11,400 | \$11,400 |
| | stub col | 2 | 450 | 1 | ea | \$900 | \$900 |
| | & baseplate | | | | | | |
| | PE 150UB | 1 | | 1 | ea | \$675 | \$675 |
| | PW 100UB | 1 | | 1 | ea | \$600 | \$600 |
| | fix plates | 11 | 175 | 1 | ea | \$1,925 | \$1,925 |
| | site meas | 1 | 425 | 1 | ea | \$425 | \$425 |
| | place clad | 24 | 55 | 1 | ea | \$1,320 | \$1,320 |
| | Sub total this item | | | | | | \$17,245 |
| 3 Steelwork GALVANIZE | | | | | | | |
| | No. | rate | Q kg | Amount | | | |
| | beams | 2 | \$1.16 48 | 16 | | | \$1,782 |
| | stub col | 2 | \$1.05 11.8 | | | | \$25 |
| | & baseplate | | | | | | |
| | PE 150UB | 9 | \$1.16 12 | | | | \$125 |
| | PW 100UB | 5 | \$1.16 10 | | | | \$58 |
| | fix plates | 11 | \$1.05 3 | | | | \$35 |
| | TRANSPORT to & from galvaniser Perth | | | 1 | item | \$1,850 | \$1,850 |
| | Sub total this item | | | | | | \$3,874 |
| 4 Steelwork erection/fix | | | | | | | |
| | No. | rate | Amount | | | | |
| a | beams | | | | | | |
| b | Modify fixings | 16 | 450 1 | | | | \$450 |
| | crane | 1 | 195 1 | | | | \$3,120 |
| | lab | 3 | 55 32 | | | | \$5,280 |
| c | PE 150UB | 2 | 55 12 | | | | \$1,320 |
| d | PW 100UB | 2 | 55 12 | | | | \$1,320 |
| e | scaffold | 7 | 275 | | | | \$1,925 |
| | Trimdek | 2 | 55 16 | | | | \$1,760 |
| | Sub total this item | | | | | | \$15,175 |

| No. | Item | Qty | Units | Rate | 2 |
|-----------------------------------------------------------|--------------------------------------------|------|-------|--------|-----------------|
| 5 Footings x 2 | | | | | |
| | No. | rate | Q | Amount | |
| a | excav | | | | |
| | lab | 1 | 55 | 8 | \$440 |
| | mach | 1 | 80 | 4 | \$320 |
| b | form | | | | |
| | lab | 1 | 55 | 6 | \$330 |
| | mat | 1 | 42 | 2 | \$84 |
| c | reo steel | | | | |
| | mat | 2 | 73 | 1 | \$146 |
| | lab | 1 | 55 | 8 | \$440 |
| d | pour | | | | |
| | mat | 2 | 225 | 0.48 | \$216 |
| | lab | 1 | 55 | 6 | \$330 |
| | Sub total this item | | | | \$2,306 |
| 6 Concrete paving - riverside | | | | | |
| | No. | rate | Q | Amount | |
| a | Remove slabs & excavate 500mm deep | | | | |
| | lab | 2 | 55 | 8 | \$880 |
| | mach exc | 1 | 110 | 6 | \$660 |
| | truck | 1 | 110 | 6 | \$660 |
| | 500mm deep new sand & compact | | | 31 m3 | 33 \$1,023 |
| b | form | | | | |
| | lab | 2 | 55 | 8 | \$880 |
| | mat | 1 | 187 | 1 | \$187 |
| c | reo steel | | | | |
| | mat | 1 | 279 | 1 | \$279 |
| | lab | 2 | 55 | 8 | \$880 |
| d | pour | | | | |
| | mat | 1 | 245 | 5.2 | \$1,274 |
| | lab | 2 | 55 | 6 | \$660 |
| | Sub total this item | | | | \$7,383 |
| 7 MISCELLANEOUS | | | | | |
| a | Mobilise/demobilise | | | 1 item | \$450 |
| b | Re-engineer fixing, footings & drafting | | | 1 item | \$4,350 |
| c | Demolish/remove exist steel structure roof | | | 1 item | \$4,600 |
| d | Cleanup & Miscell | | | 1 item | \$925 |
| | Sub total this item | | | | \$10,325 |
| | Sub total ALL items | | | | \$66,478 |
| e | Overheads 17% | | | | \$11,301 |
| f | Contingency 5% | | | | \$3,324 |
| g | SUB TOTAL OF WORKS | | | | \$81,103 |
| h | GST ON THE ABOVE | 10% | | | \$8,110 |
| i | TOTAL COST WORKS (includes gst) | | | | \$89,213 |
| TOTAL COST of ROOF REPLACEMENT & misc | | | | | \$89,213 |
| | | | | | (includes gst) |
| Kevin Lodge Engineering ph 98 482790 kleng@westnet.com.au | | | | | |