

| <b>OBERTSON</b>  |  |  |  |
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|  | RVEYING  |  |  |
|  | ERVICES LTD.   |  |  |
| Mc ARTHUR ROBERTSON<br>LICENSED LAND SURVEYOR  |  |  |  |
| Cane Hall (Roundabout)<br>P.O. Box 233, Kingstown, St.Vincent & the Grenadines<br>Tel: (784) 457 1279 (O) . (784) 4561167 (Res) .<br>(784) 528 8590 (cell) Fax: (784) 485 6219   |  |  |  |
| Date of Survey:  | Surveyed by:   |  |  |
| 26,27.01-01,02.02.2023   | DEFA   |  |  |
| Date Created:<br>02.02.2023  | Drawn by:<br>DEFA  |  |  |
| Date Last modified:  | Checked by:  |  |  |
| 02.02.2023   | Mc Arthur Robertson  |  |  |
| <i>TOPO-3-2023</i>   | Sneet No:<br><i>lof l</i>  |  |  |
| CLIENT   |  |  |  |
| National Snot  | ts   |  |  |
| Council  |  |  |  |
| Council  |  |  |  |
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| PROJECT<br>Topographic<br>Around Arno  | 「:<br>Survey Road<br>s Vale  |  |  |
| <b>PROJEC</b><br>Topographic<br>Around Arno<br>Playing Field   | [:<br>Survey Road<br>s Vale  |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere  | C:<br>Survey Road<br>s Vale<br>d Survey  |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation  |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN I   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil   |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN T   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:  |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN T<br>PARISH:<br>St. George  | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale  |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN T<br>PARISH:<br><i>St. George</i><br>LOT NO:<br><i>nil</i>  | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil                                    |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN<br>PARISH:<br>St. George<br>LOT NO:<br>nil  | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil                                    |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN T<br>PLAN T<br>PARISH:<br><i>St. George</i><br>LOT NO:<br><i>nil</i><br>NOT   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>PLAN<br>PLAN<br>PLAN<br>PLAN<br>NOT<br>Coordinates System= S<br>West Indies Grid<br>Datum = Mean sea leve<br>Regular contours = 0.2  | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>Plan Info<br>PLAN T<br>PLAN T<br>PLAN T<br>PLAN T<br>NOT<br>Coordinates System= S<br>West Indies Grid<br>Datum = Mean sea leve<br>Regular contours = 0.2   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>Plan Info<br>Plan Info<br>PLAN T<br>PLAN T<br>PARISH:<br><i>St. George</i><br>LOT NO:<br><i>nil</i><br>NOT<br>Coordinates System= S<br>West Indies Grid<br>Datum = Mean sea leve<br>Regular contours = 0.2<br>Index contours = 1 ft<br>Road Edge   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |
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| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>Plan Info<br>Plan Info<br>PLAN T<br>PLAN T<br>PARISH:<br><i>St. George</i><br>LOT NO:<br><i>nil</i><br>NOT<br>Coordinates System= S<br>West Indies Grid<br>Datum = Mean sea leve<br>Regular contours = 0.2<br>Index contours = 1 ft<br>Road Edge<br>Wall<br>Drain Edge<br>Drain Center Line<br>Wire Fence<br>Man Unio  | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |
| PROJECT<br>Topographic<br>Around Arno<br>Playing Field<br>Registere<br>Plan Info<br>Plan Info<br>Plan Info<br>PLAN T<br>PLAN T<br>PLAN T<br>NOT<br>Coordinates System= S<br>West Indies Grid<br>Datum = Mean sea leve<br>Regular contours = 0.2<br>Index contours = 1 ft<br>Road Edge<br>Wall<br>Drain Edge<br>Drain Center Line<br>Wire Fence<br>Man Hole<br>Ramp   | C:<br>Survey Road<br>s Vale<br>d Survey<br>ormation<br>NO: nil<br>LOCALITY:<br>Arnos vale<br>AREA:<br>nil<br>TES<br>St. Vincent 45 / British |  |  |







|  | NQIES al Notes   |
|--|--|
| 1 Contraction of the second seco | 1) Do not scale drawings.  |
| ER .   | <ol> <li>The Contractor shall verify all<br/>dimensions before proceeding with<br/>any work and report any<br/>discrepancies to the Engineer<br/>immediately.</li> </ol>   |
| 10 × 10  | <ol> <li>The final road alignment to be<br/>determined by Engineer on site.</li> </ol>   |
| 2 GIU  | <ol> <li>All accesses would be adjusted<br/>on site.</li> </ol>  |
| ζ ζ  | 5) Utility poles and pipe lines would<br>be adjusted by utility companies.   |
| 40.  | <li>6) Stone is to be packed neatly<br/>and compacted at grade level for a<br/>surface.</li>   |
| 43 <sup>x2</sup>   | 7) <u>CONCRETE CUBE DESIGN</u><br><u>STRENGTH AT 28 DAYS</u><br>Blinding   |
| 0 40' 80'  | Use C7.5/20, strength ≥ 7.5MPa<br>or 1100 psi.   |
|  | Walls, Slab on grade, Head/Toe<br>Walls, Aprons, Catchpits, Bases and<br>Footings, Kerb, Slippers, Swales, Box<br>drains, surrounds etc.<br>Use C30/20, strength ≥ 30MPa<br>or 4350 psi.   |
|  | Fords, Box Culverts, Bridges,<br>Structural Concrete<br>Use C40/20, strength ≥ 40 MPa<br>or 5800 psi.  |
|  | 8) <u>REINFORCEMENT</u><br>All reinforcing steel shall conform to<br>BS 4449 (Deformed High<br>Yield/Tensile Steel Bars and Plain<br>Round Bars) with yield strength ≥<br>410 MPa or 60000 psi.  |
|  | Welded wire fabric shall conform to<br>BS 4483 and shall be lapped one<br>full mesh grid at side & end splices<br>and wired together.  |
|  | Cover to reinforcement shall be<br>50mm or 2" unless otherwise<br>indicated on drawing.  |
|  | All reinforcement shall be clean of<br>debris and inspected in place by the<br>Engineer before concrete is poured.<br>Notice for inspection shall be given<br>as required by the Engineer or<br>Specification.   |
|  | 9) <u>FOUNDATIONS</u><br>All footings shall be placed on firm,<br>approved, well compacted existing or<br>imported material. Backfill shall be<br>compacted to 95% Modified Proctor<br>Maximum Dry Density. Unsuitable<br>material shall be excavated and<br>replaced with properly compacted fill<br>as directed by the Engineer. |
|  | CONSULTANTS:<br>MTWLPP<br>MINISTRY of TRANSPORT,   |
|  | WORKS,LANDS and PHYSICAL<br>PLANNING<br>CLIENT:  |
|  | NATIONAL SPORTS COUNCIL  |
|  | PROJECT:<br>CONSTRUCTION OF THE RING<br>ROAD AT ARNOS VALE<br>SPORTS COMPLEX   |
|  | ROAD PLAN AND PROFILE 3  |
|  | CHECKED:         SCALE:<br>1": 40-0"         DRAWN BY<br>YAAC         DWE. No.<br>S03           DATE:         CHECKED:         of           03/03/2023         03/03/2023         S03  |







| <u>NOTES</u><br>1) Do  | o not scale d   | rawings.  |   |  |  |
|--|---|---|---|--|--|
| 2) Th<br>dimens<br>any wo<br>discrep<br>immed  | ne Contractor<br>sions before p<br>ork and repor<br>bancies to the<br>iately.   | shall verify<br>proceeding<br>t any<br>e Engineer   | all<br>with   |  |  |
| 3) Th<br>determ  | ie final road<br>iined by Engi  | alignment t<br>neer on site   | o be<br>e.  |  |  |
| 4) All<br>on site  | l accesses w<br>e.  | ould be adj   | usted   |  |  |
| 5) Ut<br>be adj  | ility poles an<br>usted by utili  | d pipe lines<br>ty companie   | s would<br>es.  |  |  |
| 6) St<br>and co<br>surface   | <li>6) Stone is to be packed neatly<br/>and compacted at grade level for a<br/>surface.</li>  |   |   |  |  |
| 7) <u>CO</u><br><u>STRENO</u><br>Blindino  | DNCRETE CUB<br>GTH AT 28 D/<br>9  | E DESIGN<br><u>AYS</u>  | 7.5140.0  |  |  |
| or 110   | se C7.5/20,<br>)0 psi.  | strengtn ≥  | 7.5MPa  |  |  |
| Walls,<br>Walls,<br>Footing<br>drains,<br>U<br>or 435  | Slab on grad<br>Aprons, Catch<br>gs, Kerb, Slip<br>surrounds e<br>se C30/20, s<br>50 psi.   | e, Head/To<br>npits, Bases<br>bers, Swales<br>tc.<br>strength ≥ 3   | e<br>and<br>s, Box<br>30MPa                             |  |  |
| Fords,<br>Structu  | Box Culverts  | Bridges,  |   |  |  |
| or 580   | se C40/20, s<br>)0 psi.   | strength ≥ 4  | 40 MPa  |  |  |
| 8) <u>R</u><br>All reir<br>BS 44-<br>Yield/T<br>Round<br>410 M                                   | EINFORCEMENT<br>nforcing steel<br>49 (Deformed<br>Tensile Steel<br>Bars) with y<br>Pa or 6000   | shall confo<br>High<br>Bars and Pl<br>ield strengt  | orm to<br>Iain<br>h ≥                                   |  |  |
| Welded<br>BS 444<br>full me<br>and wi  | wire fabric<br>83 and shall<br>esh grid at s<br>ired together.  | shall confor<br>be lapped<br>ide & end  | m to<br>one<br>splices                                  |  |  |
| Cover to reinforcement shall be<br>50mm or 2" unless otherwise<br>indicated on drawing.          |   |   |   |  |  |
| All reir<br>debris<br>Enginer<br>Notice<br>as req<br>Specifi                                     | nforcement sh<br>and inspecte<br>er before cor<br>for inspectio<br>uired by the<br>cation.  | nall be clea<br>d in place<br>Icrete is po<br>n shall be<br>Engineer or   | n of<br>by the<br>ured.<br>given                        |  |  |
| 9) <u>FC</u><br>All foo<br>approv<br>importe<br>compa<br>Maximu<br>materia<br>replace<br>as dire | DUNDATIONS<br>tings shall be<br>ed, well com<br>ed material.<br>tcted to 95%<br>um Dry Densi<br>al shall be ex<br>ed with prope<br>ected by the | e placed on<br>bacted exist<br>Backfill shal<br>Modified Pr<br>ty. Unsuitab<br>cavated an<br>rly compact<br>Engineer. | firm,<br>ing or<br>I be<br>octor<br>Ie<br>d<br>sed fill |  |  |
|  |   |   |   |  |  |
| CONSULTANTS:<br>MTWLPP   |   |   |   |  |  |
| MINISTRY of TRANSPORT,<br>WORKS,LANDS and PHYSICAL<br>PLANNING                                   |   |   |   |  |  |
| CLIENT:<br>NATIONAL SPORTS COUNCIL   |   |   |   |  |  |
| PROJECT:<br>CONSTRUCTION OF THE RING<br>ROAD AT ARNOS VALE<br>SPORTS COMPLEX                     |   |   |   |  |  |
| TITLE:<br>ROAD SECTIONS  |   |   |   |  |  |
| CHECKE   | ED: SCALE:<br>1" : 30'-0"   | DRAWN BY<br>YAAC  | DWE. No.<br>S01   |  |  |
|  | DATE:<br>03/03/2023   | CHECKED: 03/03/2023   | of  |  |  |