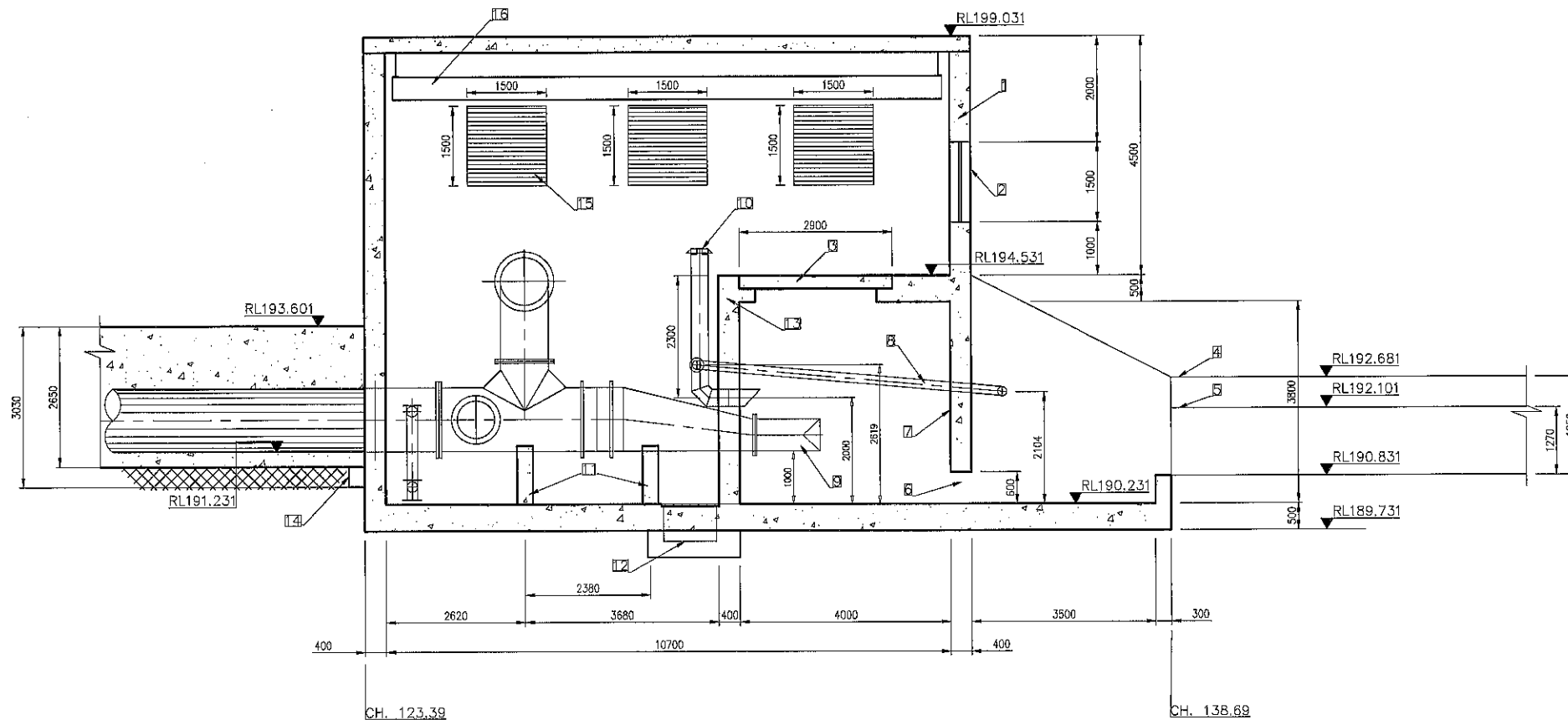
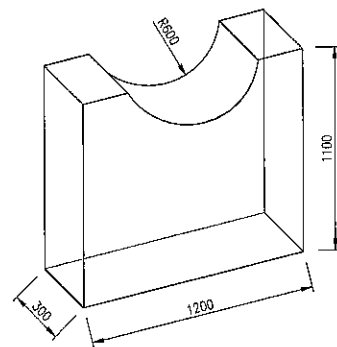
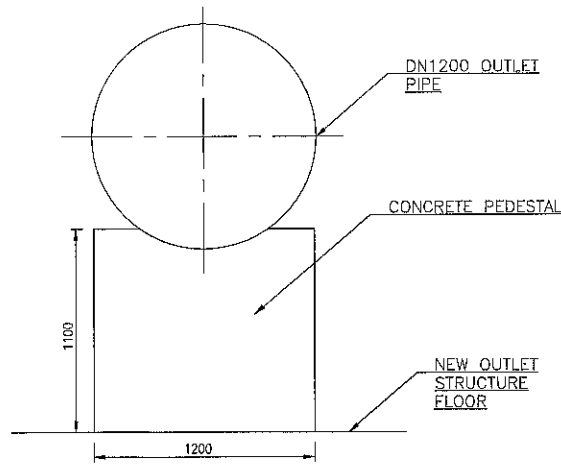


| ANNOTATION TABLE |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| 1                | WALL 6 (SEE DRG. 174859/16 TO 174870/16 FOR REINFORCEMENT DETAILS)                                            |
| 2                | WINDOW (SEE SPECIFICATION No. 5)                                                                              |
| 3                | ACCESS SLAB (2800 X 2800 mm)                                                                                  |
| 4                | RAISED CANAL WALL LEVEL                                                                                       |
| 5                | ORIGINAL CANAL WALL LEVEL                                                                                     |
| 6                | STILLING CHAMBER OPENING                                                                                      |
| 7                | S/S CLADDING TO BE INSTALLED WITH FISHHOOKS INSIDE STILLING CHAMBER(REFER TO MECHANICAL DRAWINGS FOR DETAILS) |
| 8                | 100 DIAMETER DRAINAGE PIPE FROM SUMP TO CANAL (SEE MECHANICAL DRAWINGS 174348/16 FOR DETAILS)                 |
| 9                | SLEEVE VALVE; 600NB, HYDRAULIC OPERATED (SEE MECHANICAL DRAWING 174349/16, ITEM 72)                           |
| 10               | SLEEVE VALVE AIR VENT PIPES (SEE MECHANICAL DRAWING 174348/16, ITEM 51)                                       |
| 11               | CONCRETE PIEDestal<br>SEE DETAIL 'C'                                                                          |
| 12               | FOR SUMP SEE DETAIL 'A'                                                                                       |
| 13               | WALL 5 (SEE DRG. 174859/16 TO 174870/16 FOR REINFORCEMENT DETAILS)                                            |
| 14               | BACKWALL OF EXISTING OUTLET STRUCTURE                                                                         |
| 15               | VENTILATION CURVE; RETRO FIT TYPE (SEE MECHANICAL DRAWING 174348/16, ITEM NO. 88)                             |
| 16               | 5 TON CRANE SYSTEM (SEE MECHANICAL DRAWING 174348/16 FOR DETAILS)                                             |



SECTION 06-06  
SCALE 1:50



DETAIL '1-C'  
CONCRETE PEDESTAL FOR DN1200 PIPE  
SCALE 1:20



| REVISION |      |             |     |     |
|----------|------|-------------|-----|-----|
| MOD NO.  | DATE | DESCRIPTION | FOR | DWS |
|          |      |             |     |     |

|                                                                                      |  |                                                                                                            |  |
|--------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| DEPARTMENT OF WATER AND SANITATION<br>REPUBLIC OF SOUTH AFRICA                       |  | SEDIBENG BUILDING<br>185 FRANCIS BAARD STREET<br>PRETORIA<br>(012) 336-7500                                |  |
| HEAD OFFICE<br>CIVIL ENGINEERING<br>PRIVATE BAG X313<br>PRETORIA 0001                |  |                       |  |
| L MUNRO <i>2</i> <i>21/7</i><br>DISEIGNED:                                           |  | DESIGN: S. REYNOLDS<br>DRAWN: T. MAGALE <i>Thom</i>                                                        |  |
| ENGINEER: <i>Dina Mabel</i><br>C. MAHLABELA <i>15/6</i><br>CIVIL ENGINEER, 1st class |  | DATE: <i>17/6/92</i><br>EXT. APPROVAL / DESIGN CHECKED: <i>#</i><br>DIRECTOR OF THE BUREAU: <i>17/6/92</i> |  |

|                                          |              |                         |           |           |            |   |   |   |   |                  |      |
|------------------------------------------|--------------|-------------------------|-----------|-----------|------------|---|---|---|---|------------------|------|
| DAM SAFETY REHABILITATION PROJECT        |              |                         |           |           |            |   |   |   |   |                  |      |
| KWAGGASKLOOF DAM REHABILITATION PROJECT  |              |                         |           |           |            |   |   |   |   |                  |      |
| NEW OUTLET STRUCTURE: LONG SECTION 02-02 |              |                         |           |           |            |   |   |   |   |                  |      |
| PROVINCE:                                | WESTERN CAPE | DISTRICT:               | WORCESTER | KEYCODES: | X          | X | X | - | - | OTHER<br>BRUNDER | -    |
| LOCALITY No.:                            | H100-08      | TENDER/<br>CONTRACT No. | -         | SHEET     | REG. No.   |   |   |   |   |                  | REV. |
| CALCULATION FILE:                        | -            |                         |           | 7 of 55   | 174 853/16 |   |   |   |   |                  | 00   |

NOTES:

1. DEMOLISH AND REMOVE SECTIONS OF EXISTING STILLING BASIN AND CANAL TO MAKE PROVISION FOR THE NEW OUTLET STRUCTURE.
2. PRIOR TO WELDING PIPE (ITEM 1, MECHANICAL DRAWINGS) ENSURE PROPER SURFACE PREPARATION BY CHIPPING EXISTING WALL AROUND THE LEFT OUTLET PIPE, TO MAKE PROVISION FOR WORKING SPACE.
3. EXCAVATE FOR FOUNDATIONS AND CONSTRUCT NEW REINFORCED CONCRETE OUTLET STRUCTURE.
4. FOR CONCRETE DETAILS REFER TO BLOCK 1 DRAWING NUMBERS 174849/16 TO 174858/16.
5. FOR REINFORCEMENT DETAILS REFER TO BLOCK 2 DRAWING NUMBERS 174859/16 TO 174869/16.
6. MAKE PROVISION FOR MECHANICAL, ELECTRICAL AND DE-WATERING EQUIPMENT. REFER TO MECHANICAL, ELECTRICAL AND DE-WATERING EQUIPMENT DRAWINGS FOR THE FOLLOWING DETAILS:
  - 6.1. PIPES AND SPECIALS.
  - 6.2. VALVES
  - 6.3. CRANE
  - 6.4. MISCELLANEOUS (GRATINGS, BEAMS, LADDERS, MANHOLE COVERS, VENTILATORS, LOUVERED VENIS, WINDOW GUARDS, ACCESS DOORS AND CLADDING PLATES).
  - 6.5. ELECTRICAL WORKS (LIGHTS, CABLING, DUCTS, DISTRIBUTION BOARDS, ETC).
  - 6.6. DE-WATERING EQUIPMENT (SUMP PUMPS, DRAINAGE PIPES).
7. CONTRACTOR TO PROVIDE EMPLOYER'S AGENT WITH METHOD STATEMENTS FOR APPROVAL PRIOR TO ANY DEMOLITION, EXCAVATION, FOUNDATION PREPARATION, SURFACE PREPARATION (FROM NEW TO EXISTING STRUCTURES) AND CONSTRUCTION.
8. THE DEPTH AND NATURE OF THE EXISTING FOUNDATION MATERIAL IS UNKNOWN AND WILL BE DETERMINED ON SITE, THE EMPLOYER'S AGENT WILL APPROVE THE FOUNDATION AND SURFACE BEFORE ANY CONSTRUCTION WILL COMMENCE.
9. CONTRACTOR TO TAKE INTO ACCOUNT ALL INFORMATION INCLUDED IN THE CONTRACT, INCLUDING BUT NOT LIMITED TO CONTRACT DATA, PRICING DATA, SCOPE OF WORKS WITH SPECIFICATIONS AND SITE INFORMATION.

SPECIFICATIONS:

1. CONCRETE CLASS 40/19
2. 50% ORANGE GRANULATED COREX SLAG (GOGS) CEMENT REPLACEMENT (OR EQUIVALENT , SUBJECT TO THE APPROVAL OF THE EMPLOYER'S AGENT)
3. ALL EXPOSED CORNERS TO HAVE 25 X 25mm CHAMFER.
4. MAKE PROVISION FOR STAINLESS STEEL CLADDING TO BE CAST IN STILLING CHAMBER AND ACCESS SLABS USING FISHTAILS (SEE MECHANICAL DRAWINGS ON STAINLESS STEEL CLADDING AT SLEEVE VALVE CHAMBER, DRAWING NUMBERS 174375/16M TO 174378/16M AND 174386/16M).
5. ALL NON-SHUTTERED CONCRETE SURFACES SHALL HAVE WOOD-FLOATED FINISHES.
6. WINDOWS TO BE GLASS WITH ALUMINUM FRAMES AND MUST COMPLY WITH SANS CODES 1263-1, 10137 AND 10400. TWO 1500 X 1500mm AND ONE 1500 X 750mm TO BE PROVIDED.
7. LIFTING HOOKS FOR ACCESS SLABS TO BE PROVIDED AS SPECIFIED ON DRAWING 174858/16.

STATUS:  
FOR CONSTRUCTION

|                  |                                                                               |           |
|------------------|-------------------------------------------------------------------------------|-----------|
| 9 OF 55          | NEW OUTLET STRUCTURE: CROSS SECTION 08-08                                     | 174855/16 |
| 8 OF 55          | NEW OUTLET STRUCTURE: CROSS SECTION 07-07                                     | 174855/16 |
| 7 OF 55          | NEW OUTLET STRUCTURE: CROSS SECTION 06-06                                     | 174854/16 |
| 6 OF 55          | NEW OUTLET STRUCTURE: LONG SECTION 05-05                                      | 174853/16 |
| 5 OF 55          | NEW OUTLET STRUCTURE: PLAN VIEW                                               | 174852/16 |
| 4 OF 55          | GROUTING OF GALLERY AND MODIFICATIONS AT EXISTING OUTLET CULVERT STRUCTURE    | 174851/16 |
| 3 OF 55          | GENERAL LAYOUT OF OUTLET WORKS (GRID POINTS)                                  | 174850/16 |
| 2 OF 55          | GENERAL LAYOUT OF OUTLET WORKS (KEY PLAN)                                     | 174849/16 |
| 1 OF 55          | LIST OF DRAWINGS SERIES 0800 OUTLET WORKS: CONCRETE AND REINFORCEMENT DETAILS | 174848/16 |
| SHEET            | DESCRIPTION                                                                   | REG. No.  |
| LIST OF DRAWINGS |                                                                               |           |