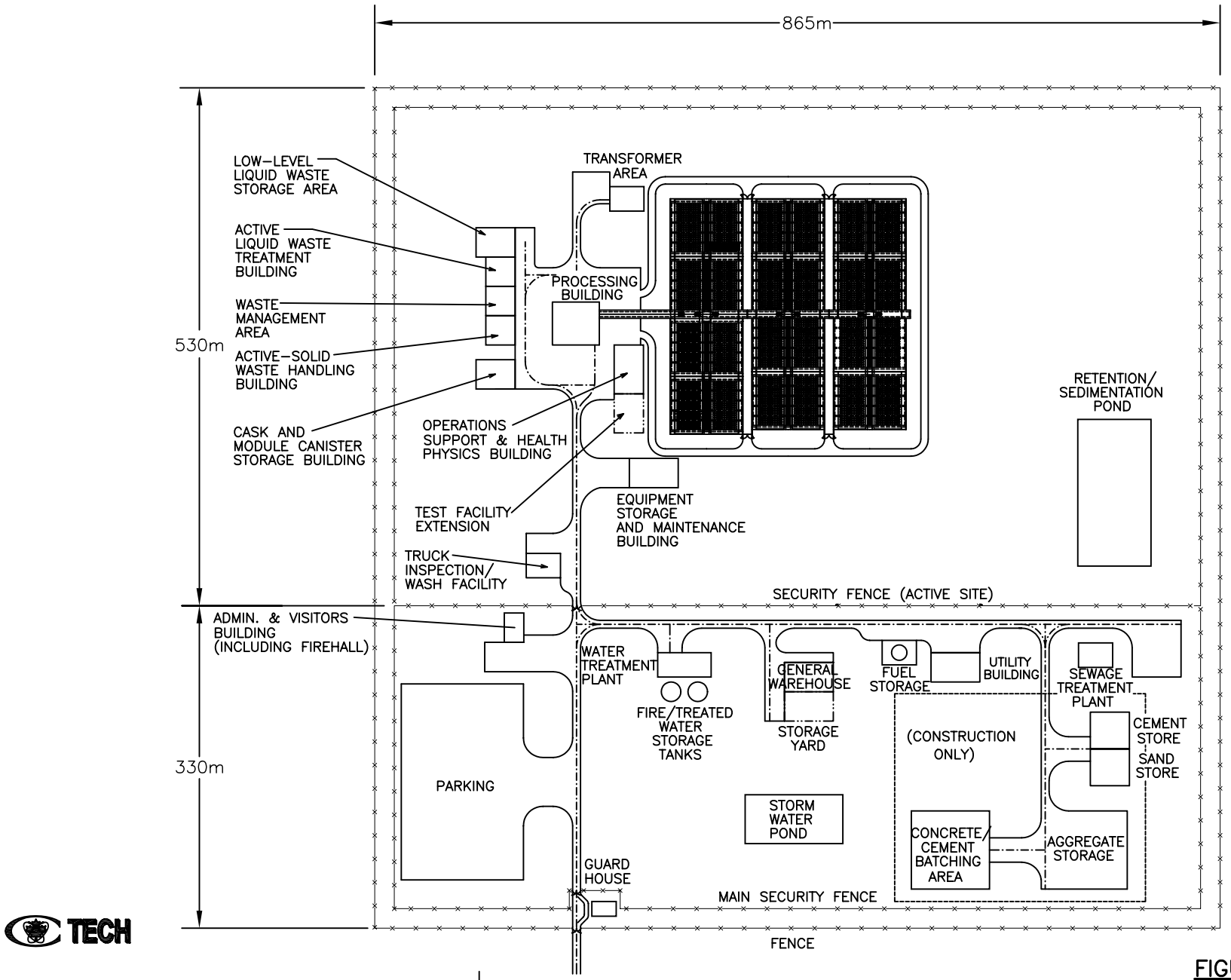
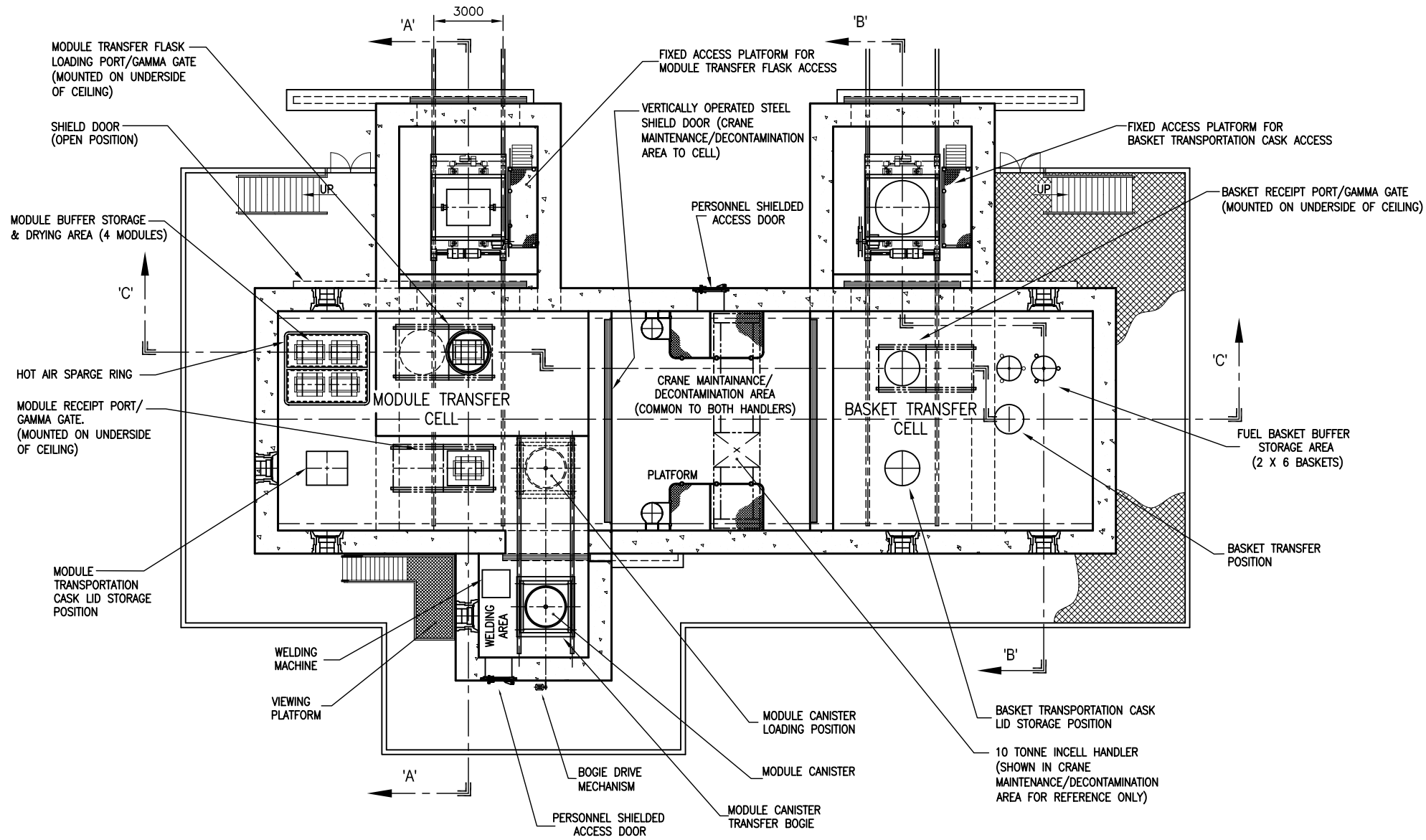


FIGURE 2.1

SITE PLAN
SURFACE MODULAR VAULT

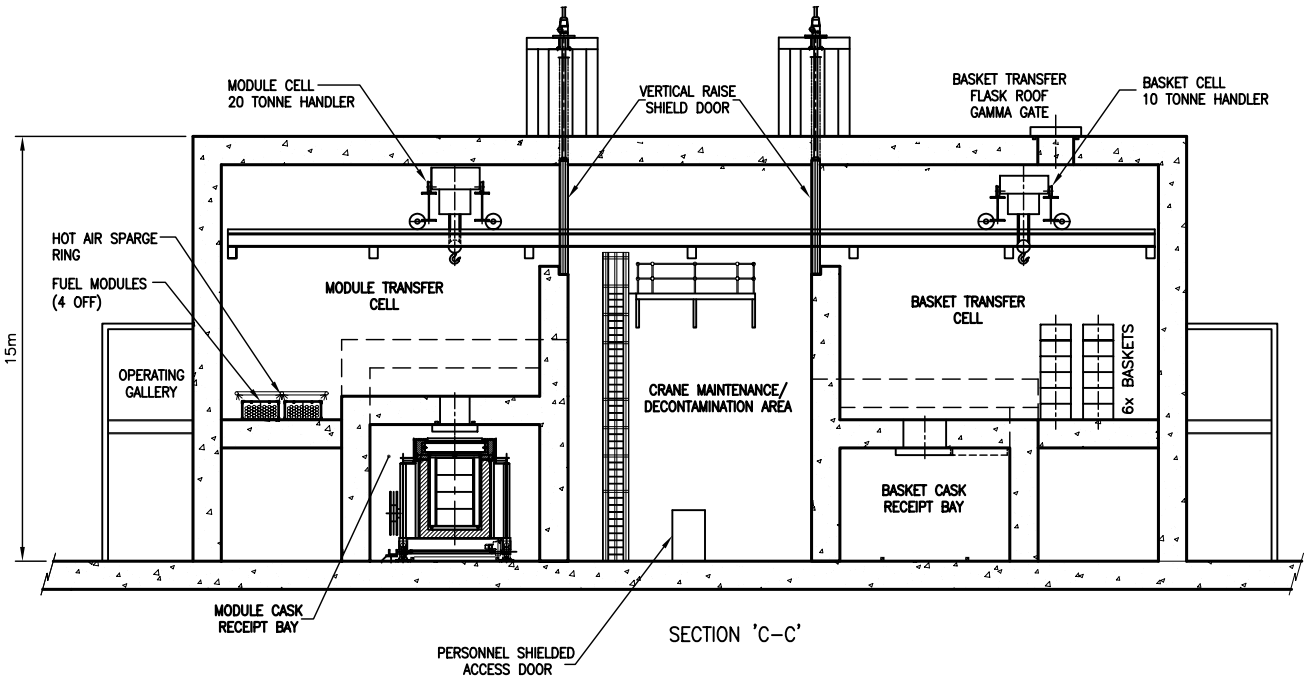
FOR SECTIONS SEE SHEET 2.



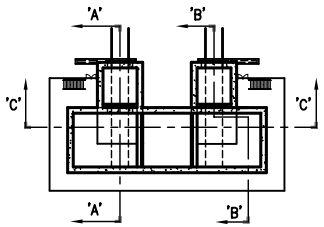
TECH

0 5m 10m 20m

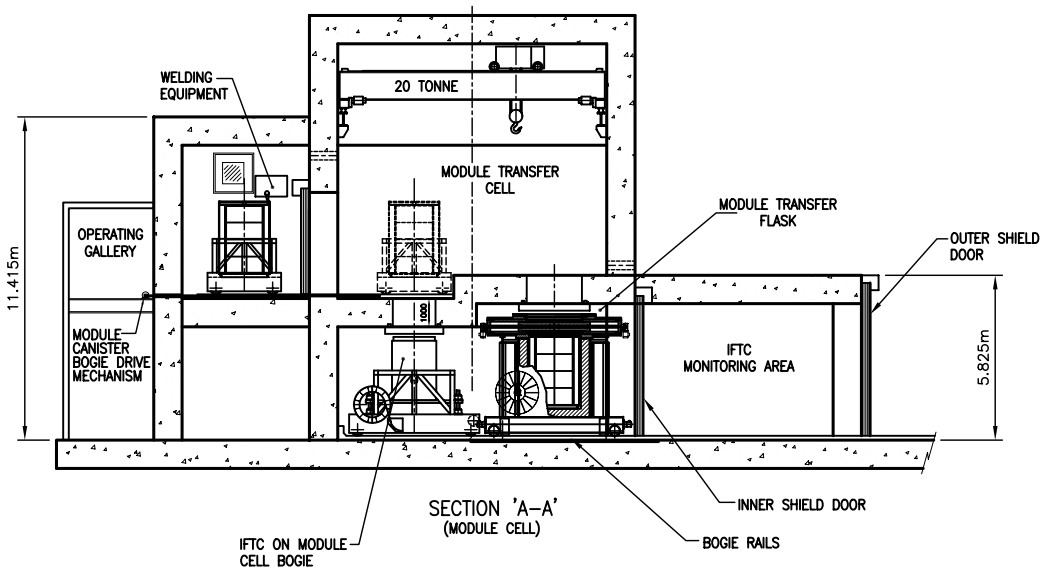
FIGURE 2.2
SHIELDED CELL LAYOUT
SURFACE MODULAR VAULT.



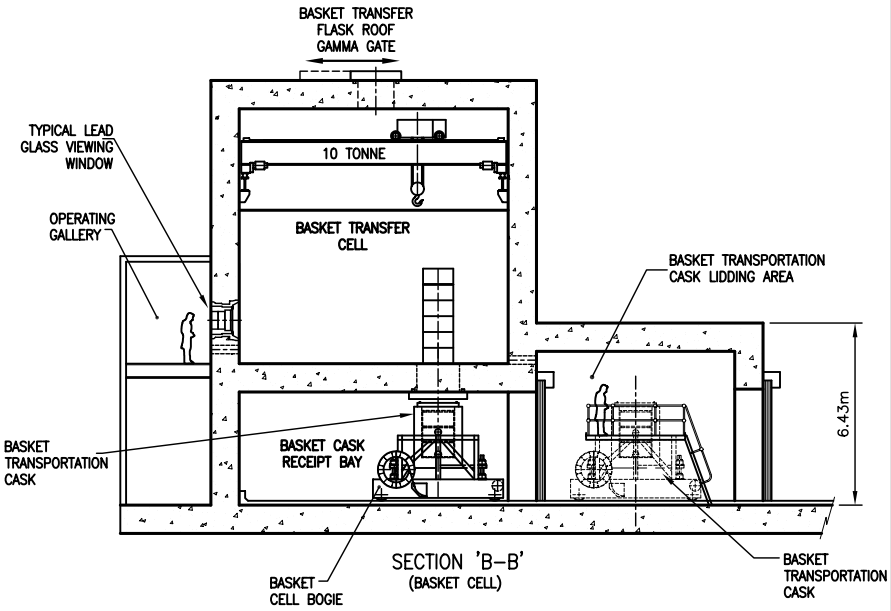
SECTION 'C–C'



KEY PLAN
(SEE SHEET 1)



SECTION 'A–A'
(MODULE CELL)



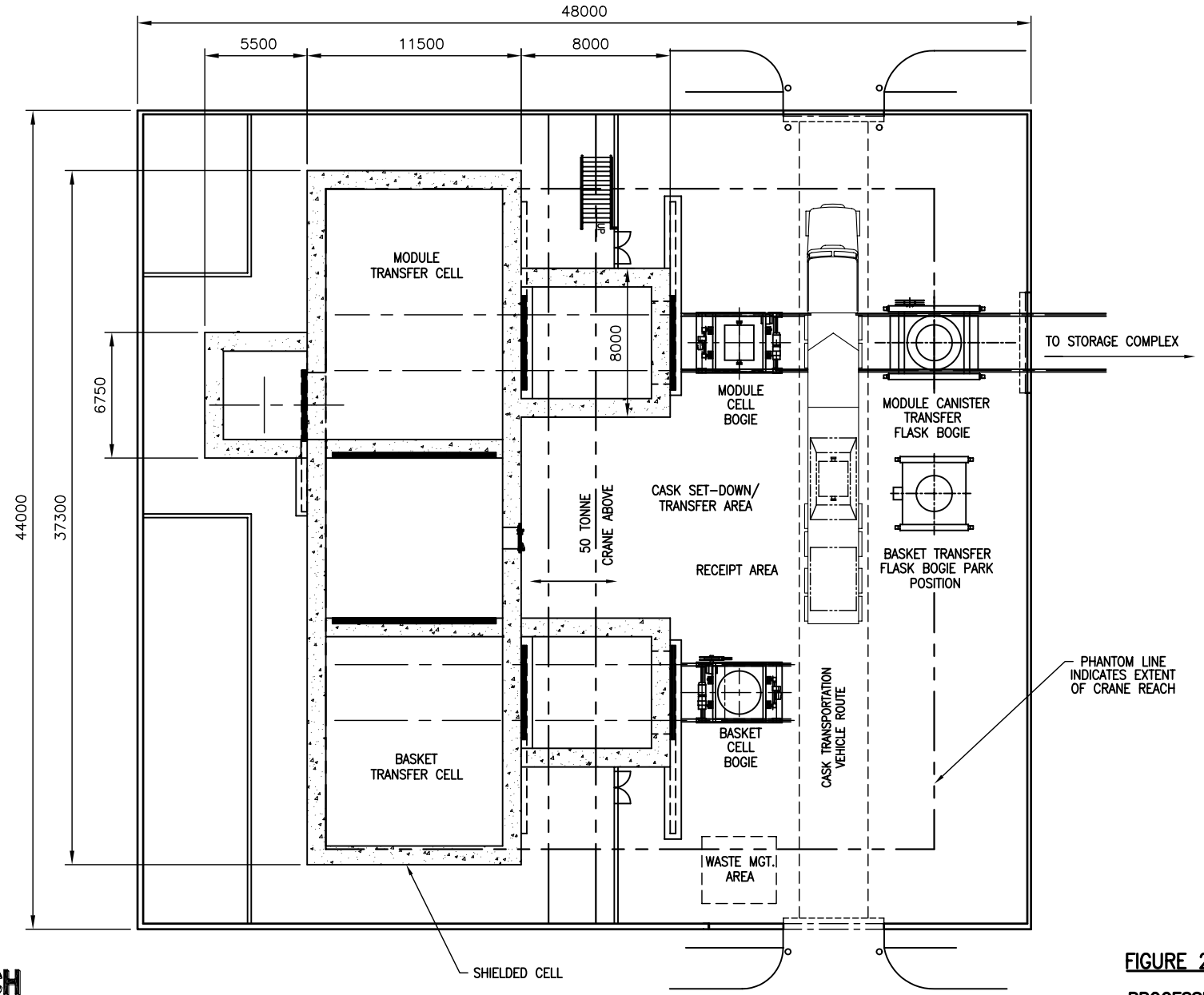
SECTION 'B–B'
(BASKET CELL)

TECH

0 5m 10m 20m

FIGURE 2.3

SHIELDED CELL LAYOUT SECTIONS. SURFACE MODULAR VAULT.



TECH

0 5m 10m 20m

FIGURE 2.4

PROCESSING BUILDING
SURFACE MODULAR VAULT

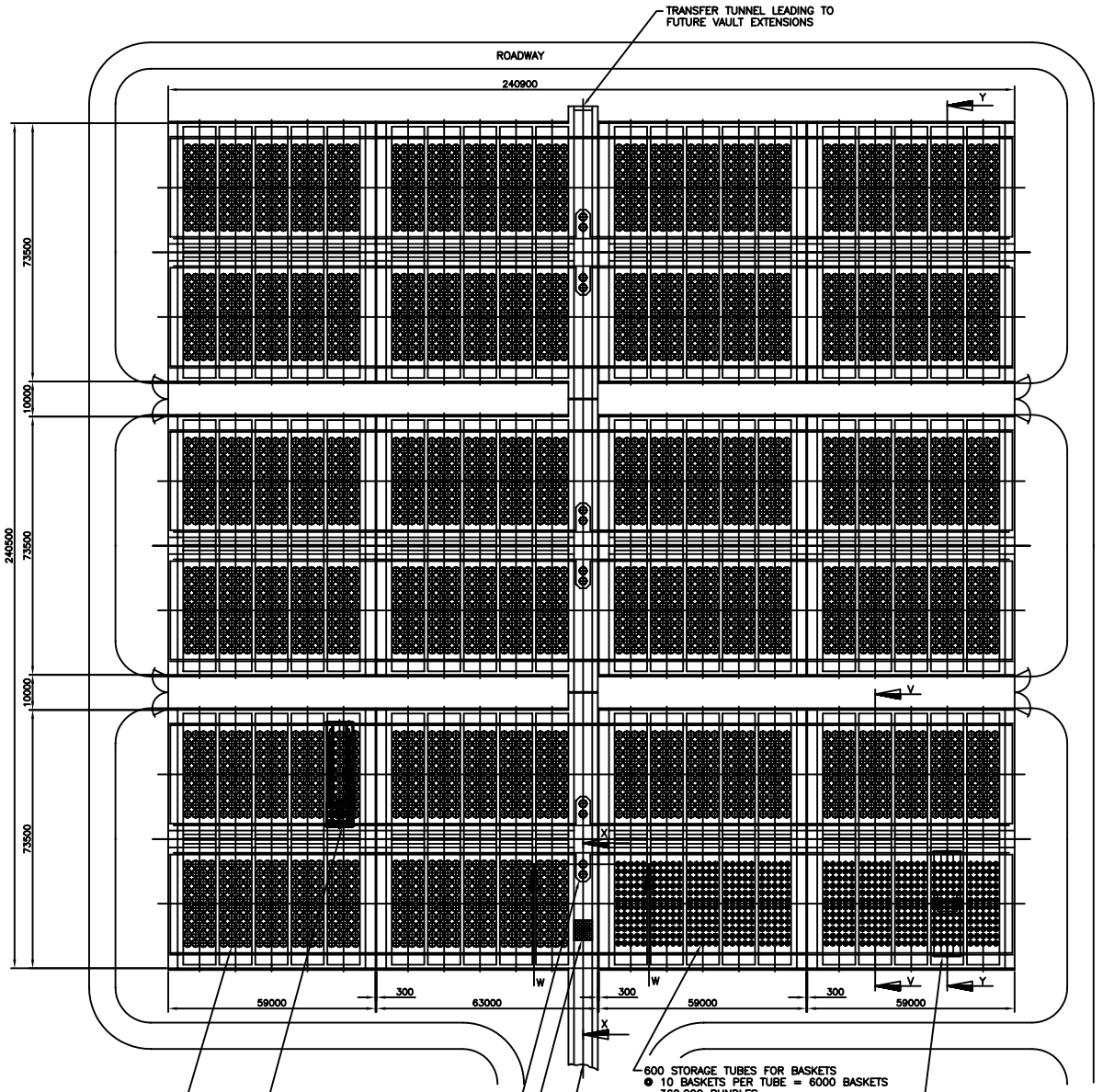
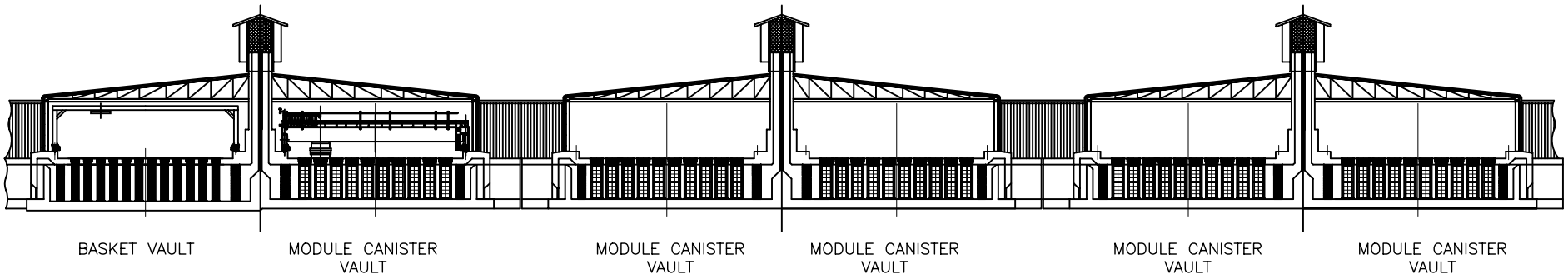


FIGURE 2.5

SURFACE MODULAR VAULT STORAGE COMPLEX PLAN

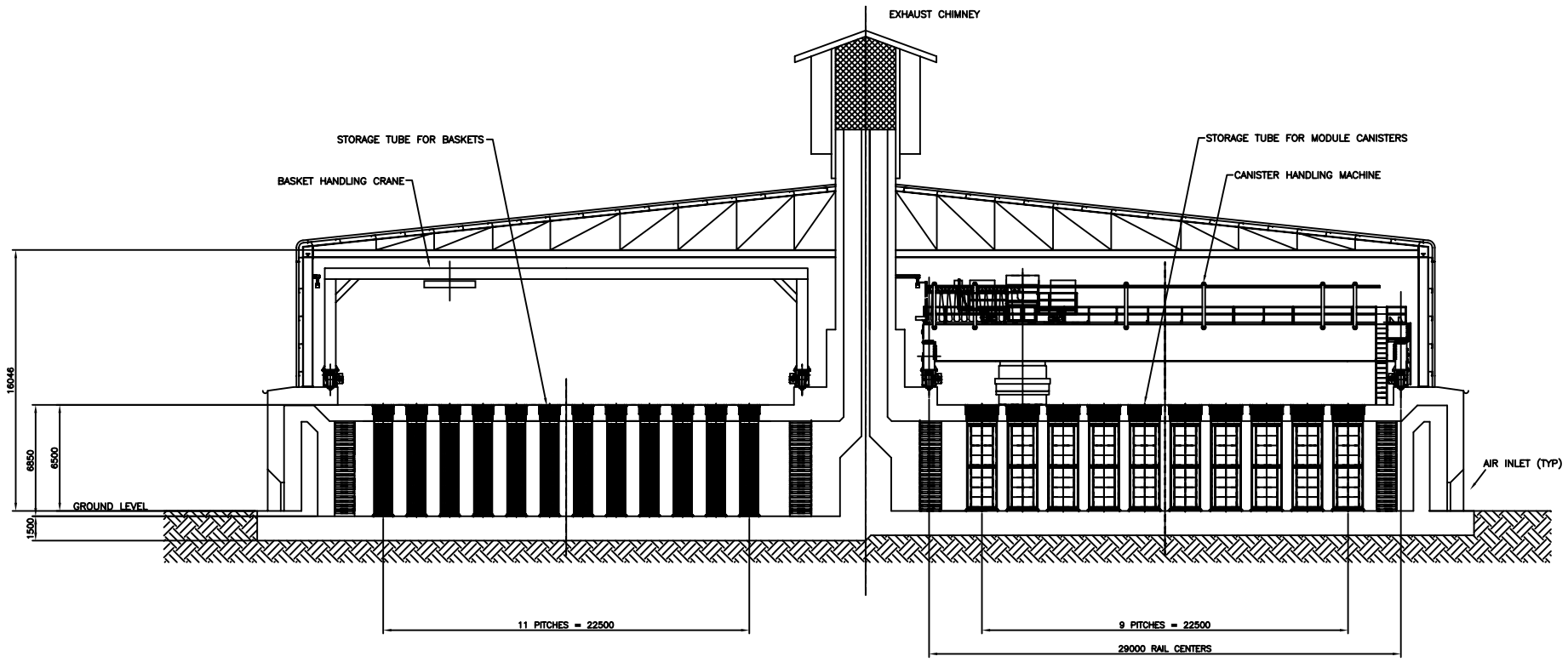


SECTION 'Y–Y'
FROM FIG. 2.5

TECH

0 10m 20m 30m 40m 50m

FIGURE 2.6
SURFACE MODULAR VAULT STORAGE COMPLEX SECTIONAL ELEVATION

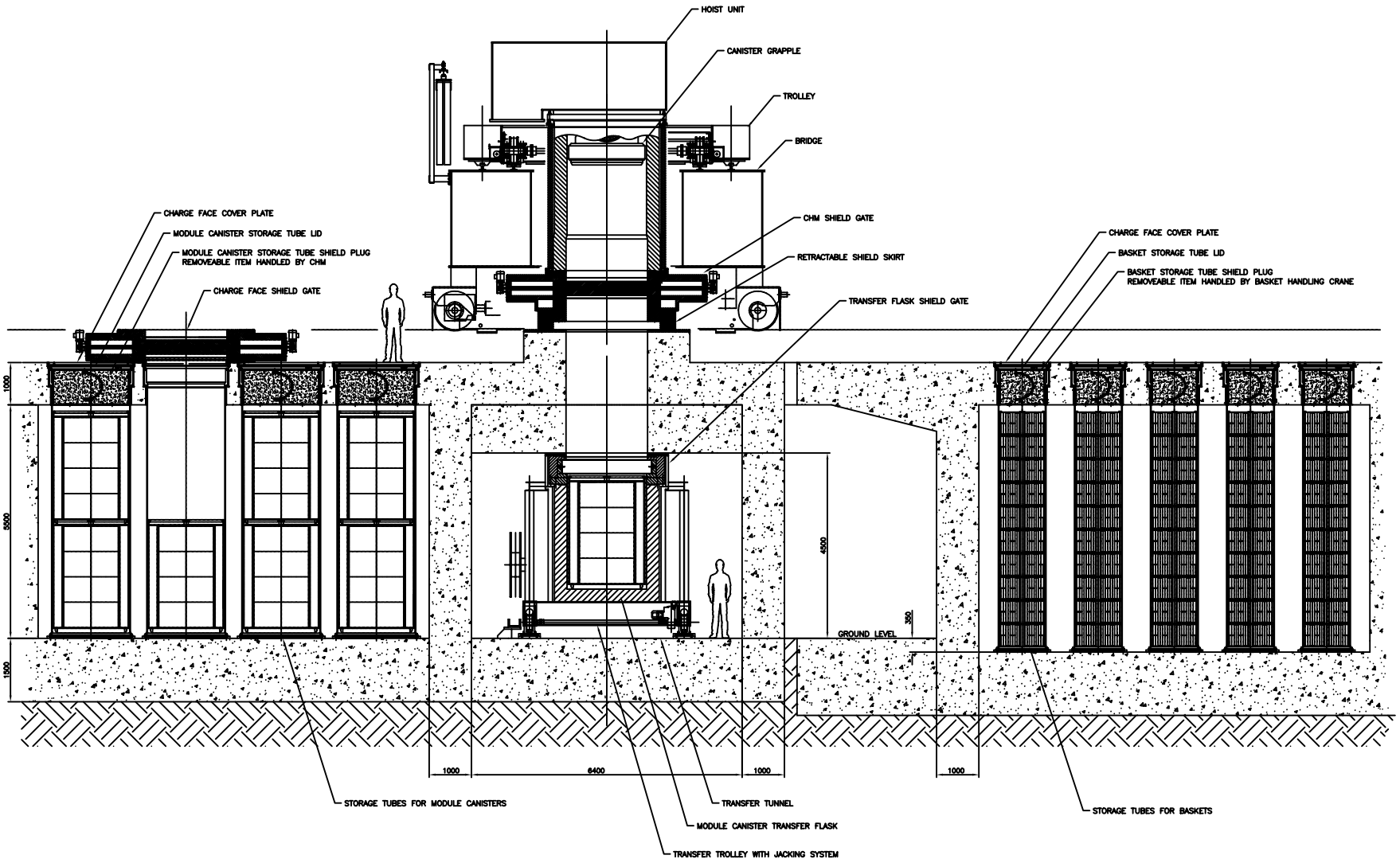


SECTION 'V–V'
FROM FIG. 2.5

TECH

0 10m 20m

FIGURE 2.7
SURFACE MODULAR VAULT
STORAGE COMPLEX
SECTIONAL ELEVATION



SECTION 'W–W'

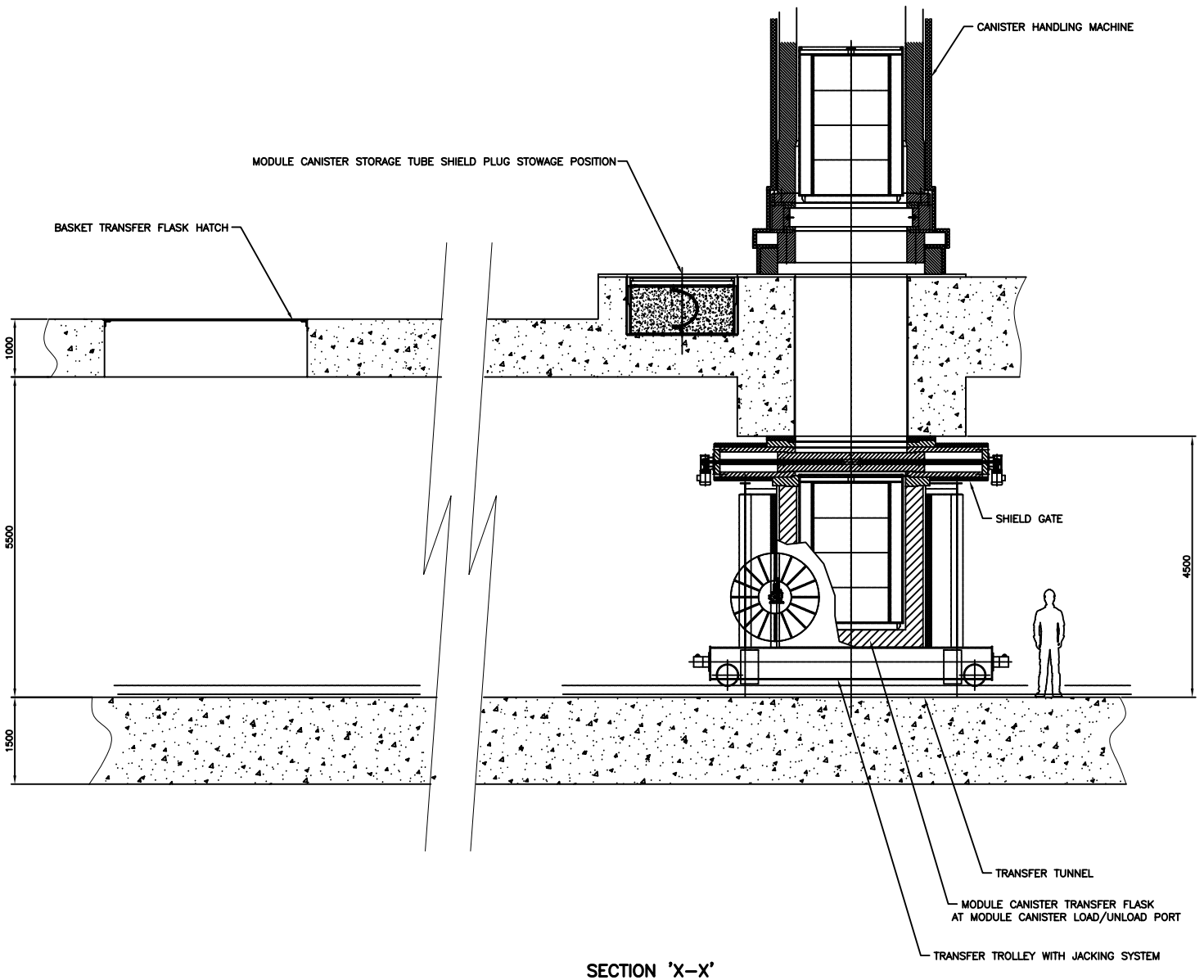
FROM FIG. 2.5

TECH

0 5m 10m

FIGURE 2.8

SURFACE MODULAR VAULT
STORAGE COMPLEX
PART SECTIONAL ELEVATION

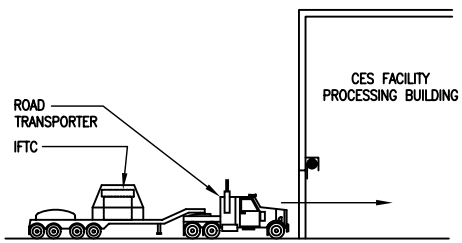


SECTION 'X–X'
FROM FIG. 2.5

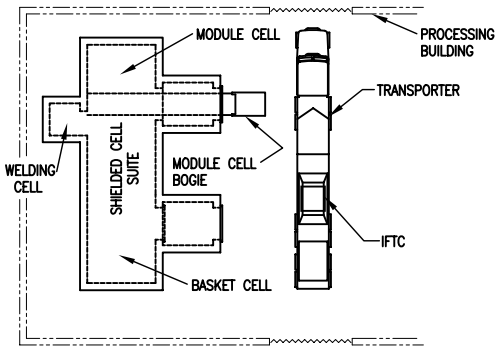
TECH

0 5m

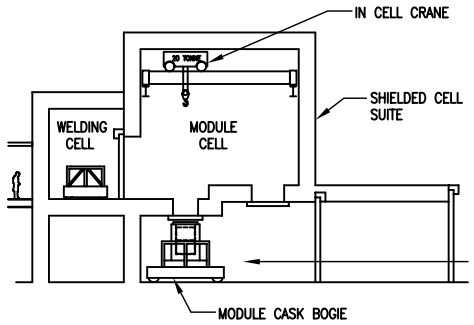
FIGURE 2.9
SURFACE MODULAR VAULT
STORAGE VAULT
PART SECTIONAL ELEVATION



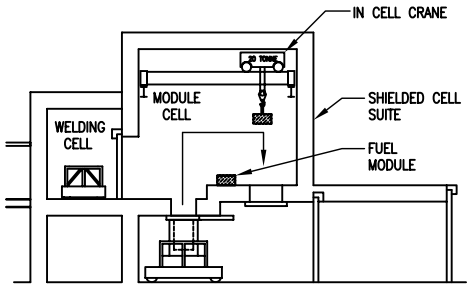
1. IRRADIATED FUEL TRANSPORTATION CASK (IFTC) RECEIVED AT CES FACILITY



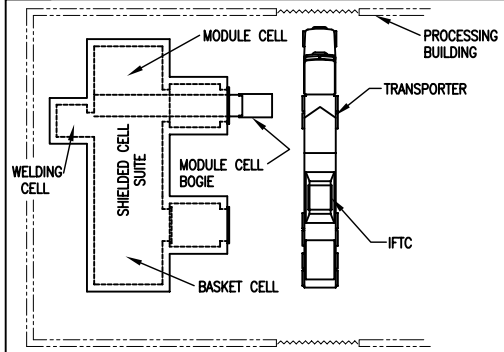
2. TRANSFER IFTC FROM TRANSPORTATION VEHICLE ONTO MODULE CELL BOGIE



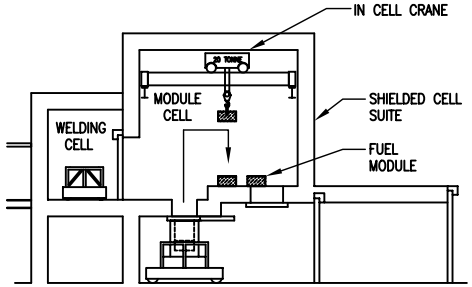
3. TRANSFER IFTC TO MODULE RECEIPT PORT ON UNDERSIDE OF SHIELDED CELL



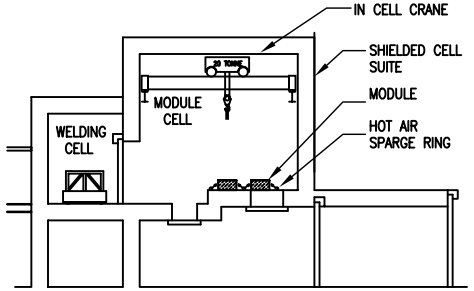
4. TRANSFER FUEL MODULES (QUANTITY 2) FROM IFTC INTO SHIELDED CELL



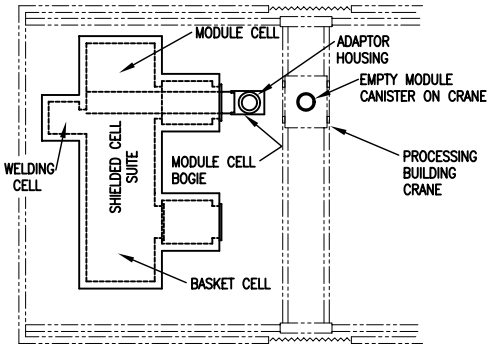
5. REPLACE EMPTY IFTC ONTO TRANSPORTATION VEHICLE FOR RETURN TO REACTOR SITE



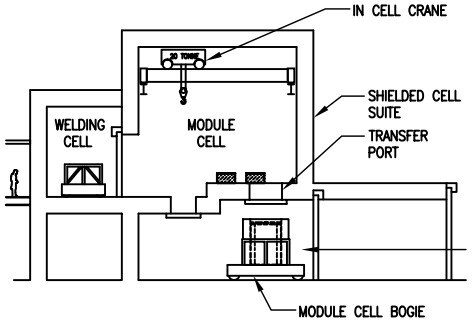
6. REPEAT LOADING PROCESS FOR A SECOND IFTC (TOTAL 4 MODULES)



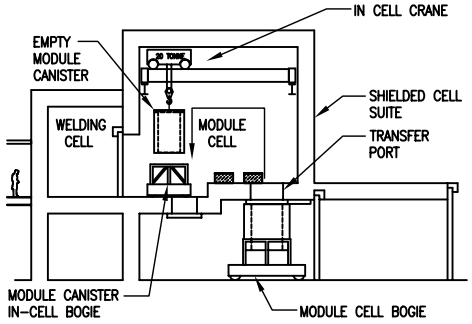
7. INITIATE HOT AIR DRYING OF MODULES



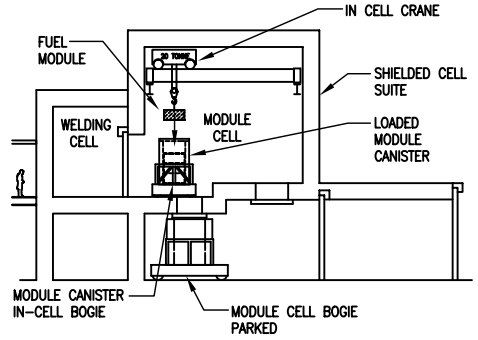
8. TRANSFER EMPTY MODULE CANISTER INTO ADAPTOR HOUSING ON MODULE CELL BOGIE



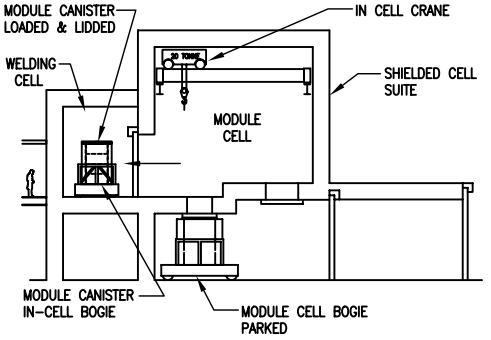
9. TRANSFER MODULE CELL BOGIE TO TRANSFER PORT UNDER SHIELDED CELL



10. TRANSFER EMPTY MODULE CANISTER FROM BOGIE TO MODULE CANISTER IN-CELL BOGIE



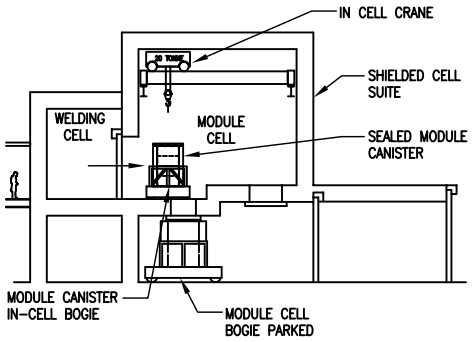
11. LOAD 4 FUEL MODULES INTO MODULE CANISTER



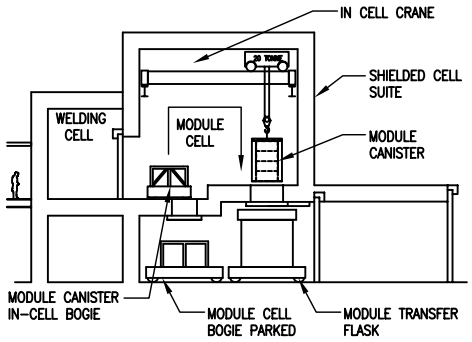
12. TRANSFER LIDDED, LOADED MODULE CANISTER INTO WELDING AREA

TECH

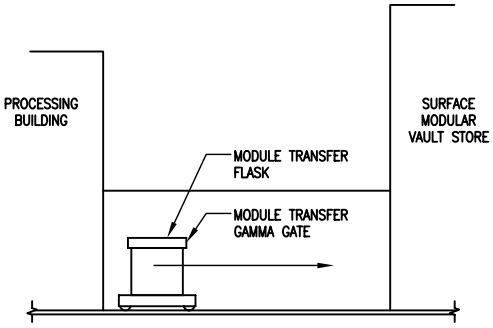
FIGURE 2.10 (SHEET 1 OF 2)
SEQUENCE DIAGRAM
SURFACE MODULAR VAULT
MODULE OPERATIONS



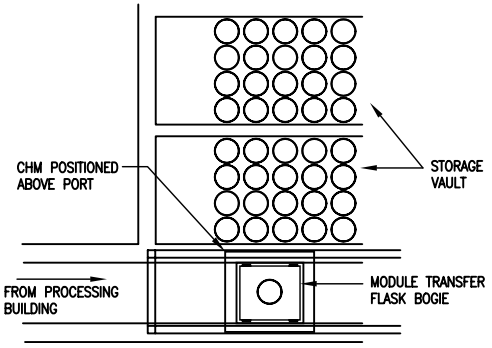
13. TRANSFER SEALED MODULE CANISTER BACK INTO MAIN CELL



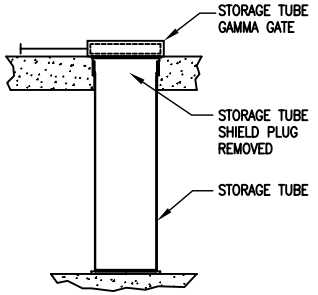
14. LOWER LIDDED, SEALED MODULE CANISTER INTO MODULE TRANSFER FLASK



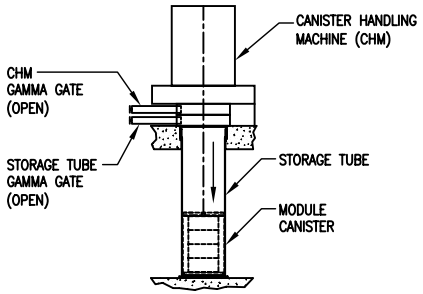
15. TRANSFER CANISTER MODULE TRANSFER FLASK FROM PROCESSING BUILDING TO STORE TUNNEL



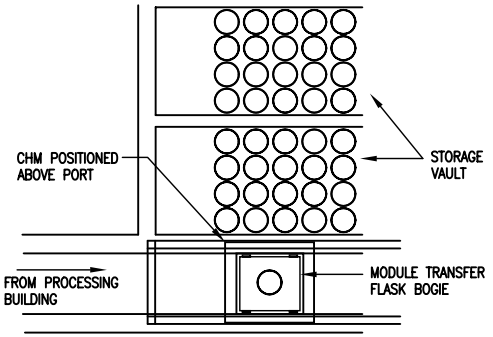
16. POSITION MODULE TRANSFER FLASK AND BOGIE BELOW SMV CANISTER HANDLING MACHINE



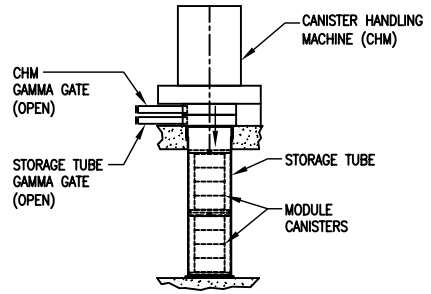
17. MODULE CANISTER VAULT STORAGE TUBE READY FOR LOADING



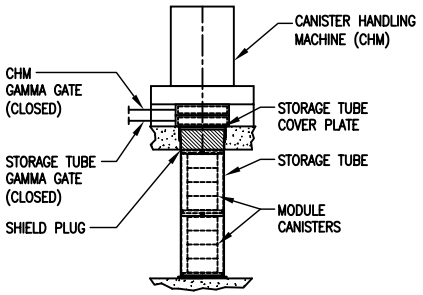
18. LOAD MODULE CANISTER INTO STORAGE TUBE USING CANISTER HANDLING MACHINE (CHM)



19. REPEAT MODULE CANISTER PRODUCTION OPERATIONS & TRANSFER MODULE FLASK & BOGIE TO STORAGE VAULT



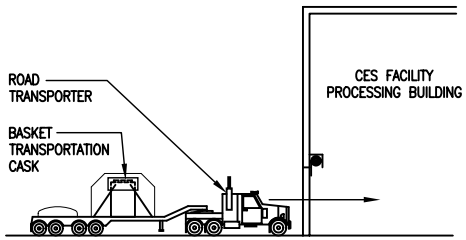
20. LOAD SECOND MODULE CANISTER INTO STORAGE TUBE USING CANISTER HANDLING MACHINE



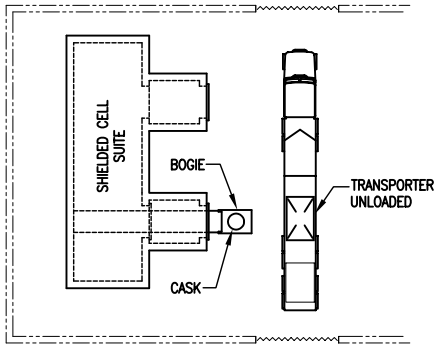
21. REINSTALL STORAGE TUBE SHIELD PLUG IN STORAGE TUBE AND INSTALL STORAGE TUBE COVER PLATE

TECH

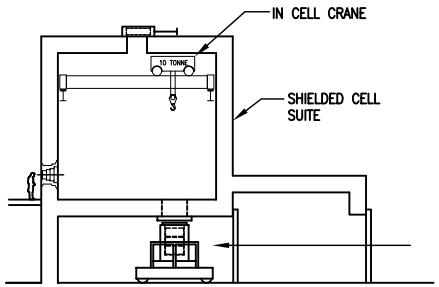
FIGURE 2.10 (SHEET 2 OF 2)
SEQUENCE DIAGRAM
SURFACE MODULAR VAULT
MODULE OPERATIONS



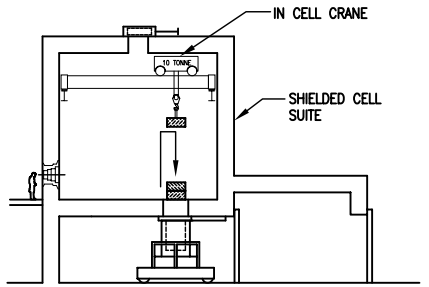
1. BASKET TRANSPORTATION CASK RECEIVED AT CES FACILITY



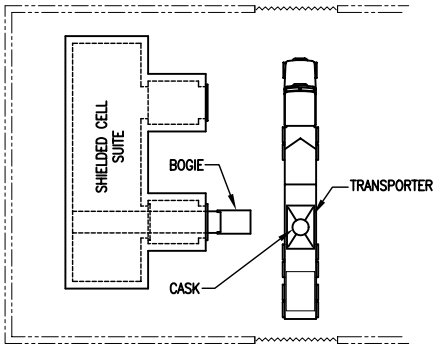
2. REMOVE CASK FROM TRANSPORT VEHICLE AND LOAD ONTO BASKET CASK BOGIE USING PROCESSING BUILDING CRANE



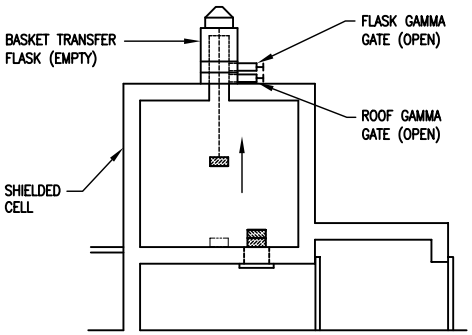
3. TRANSFER BASKET CASK BELOW SHIELDED CELL READY FOR BASKET TRANSFERS



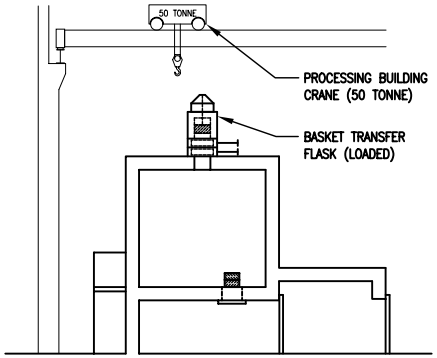
4. TRANSFER BASKETS (QUANTITY 3) FROM TRANSPORTATION CASK AND PARK IN SHIELDED CELL



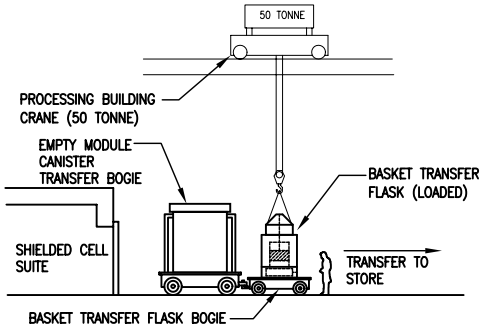
5. LOAD EMPTY TRANSPORTATION CASK ONTO TRANSPORT VEHICLE FOR RETURN TO REACTOR SITE



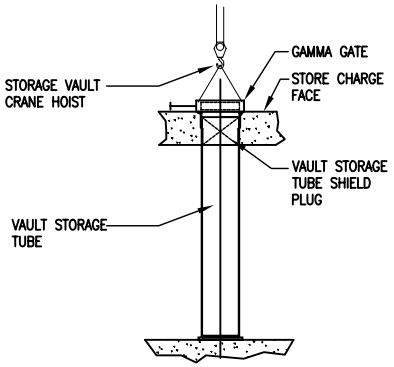
6. MOVE BASKET TO TRANSFER POSITION USING CRANE, OPEN ROOF & FLASK GAMMA GATES & WINCH BASKET INTO BASKET TRANSFER FLASK



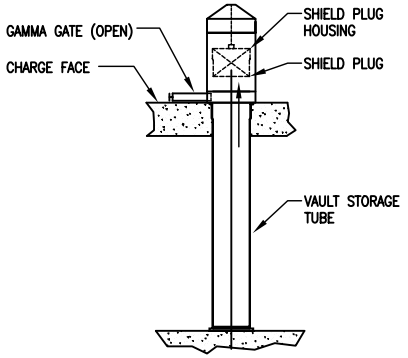
7. WHEN BASKET IS LOADED INTO TRANSFER FLASK CLOSE BOTH GAMMA GATES



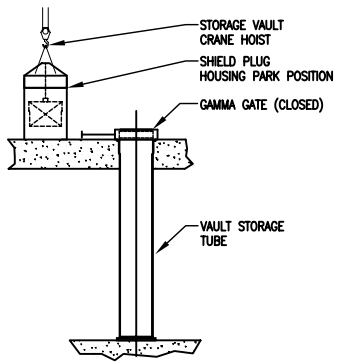
8. POSITION LOADED TRANSFER FLASK ONTO TRANSFER BOGIE. BASKET TRANSFER FLASK BOGIE IS THEN SHUNTED BY MODULE CANISTER TRANSFER FLASK BOGIE AND SENT TO THE STORE



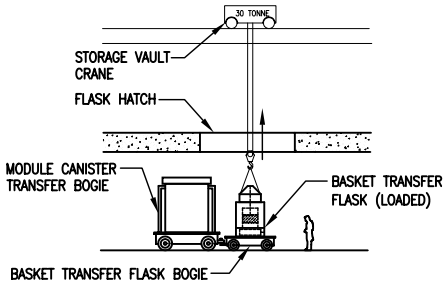
9. INSTALL CHARGE FACE GAMMA GATE ON DUTY VAULT LINER



10. OPEN CHARGE FACE GAMMA GATE, AND RAISE STORAGE TUBE SHIELD PLUG INTO SHIELD PLUG HOUSING



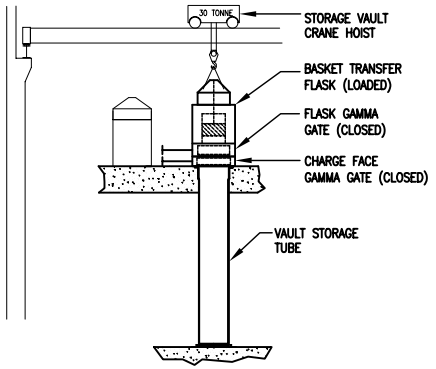
11. CLOSE CHARGE FACE GAMMA GATE AND PARK SHIELD PLUG HOUSING ADJACENT TO DUTY STORAGE TUBE



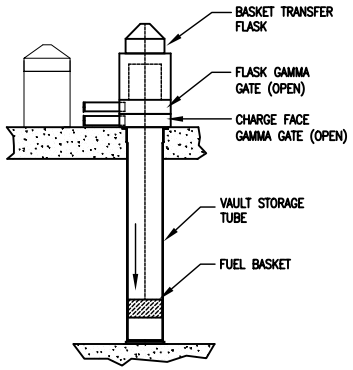
12. USING STORAGE VAULT CRANE, TRANSFER BASKET TRANSFER FLASK THROUGH HATCH

TECH

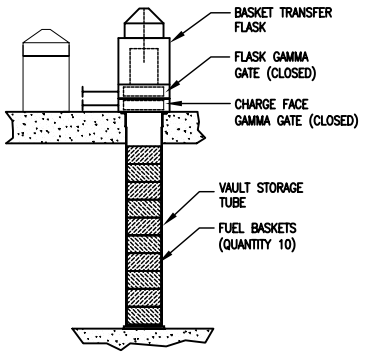
FIGURE 2.11 (SHEET 1 OF 2)
SEQUENCE DIAGRAM
SURFACE MODULAR VAULT
BASKET OPERATIONS



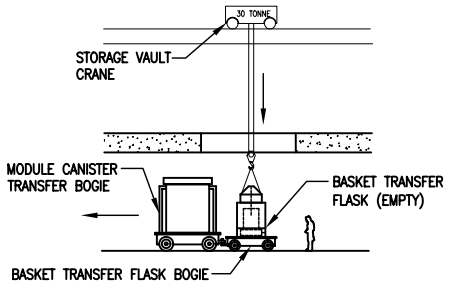
13. INSTALL BASKET TRANSFER FLASK ONTO CHARGE FACE GAMMA GATE



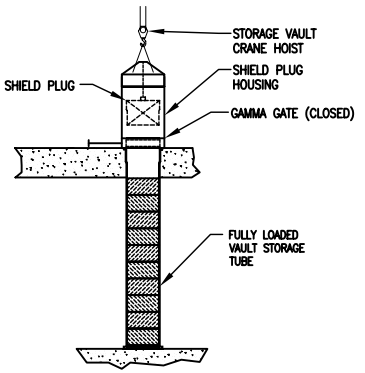
14. LOWER FUEL BASKET INTO VAULT STORAGE TUBE



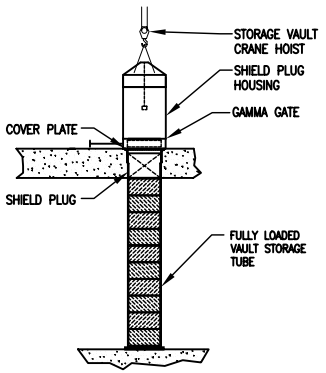
15. REPEAT BASKET LOADING OPERATIONS FOR FURTHER 9 BASKETS INTO STORAGE TUBE (10 BASKETS IN TOTAL). CLOSE GAMMA GATES



16. USING STORAGE VAULT CRANE, REMOVE BASKET TRANSFER FLASK FROM CHARGE FACE AND LOWER THROUGH FLASK HATCH ONTO BASKET TRANSFER FLASK BOGIE. SEND BACK TO PROCESS BUILDING



17. REPLACE SHIELD PLUG HOUSING ONTO GAMMA GATE



18. INSTALL VAULT STORAGE TUBE SHIELD PLUG INTO LOADED STORAGE TUBE AND INSTALL COVER PLATE

TECH

FIGURE 2.11 (SHEET 2 OF 2)
SEQUENCE DIAGRAM
SURFACE MODULAR VAULT
BASKET OPERATIONS