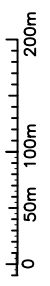


**FIGURE 3.1**  
**CASKS AND VAULTS**  
**IN SHALLOW TRENCHES**  
**SITE PLAN**



FOR SECTIONS SEE SHEET 2.

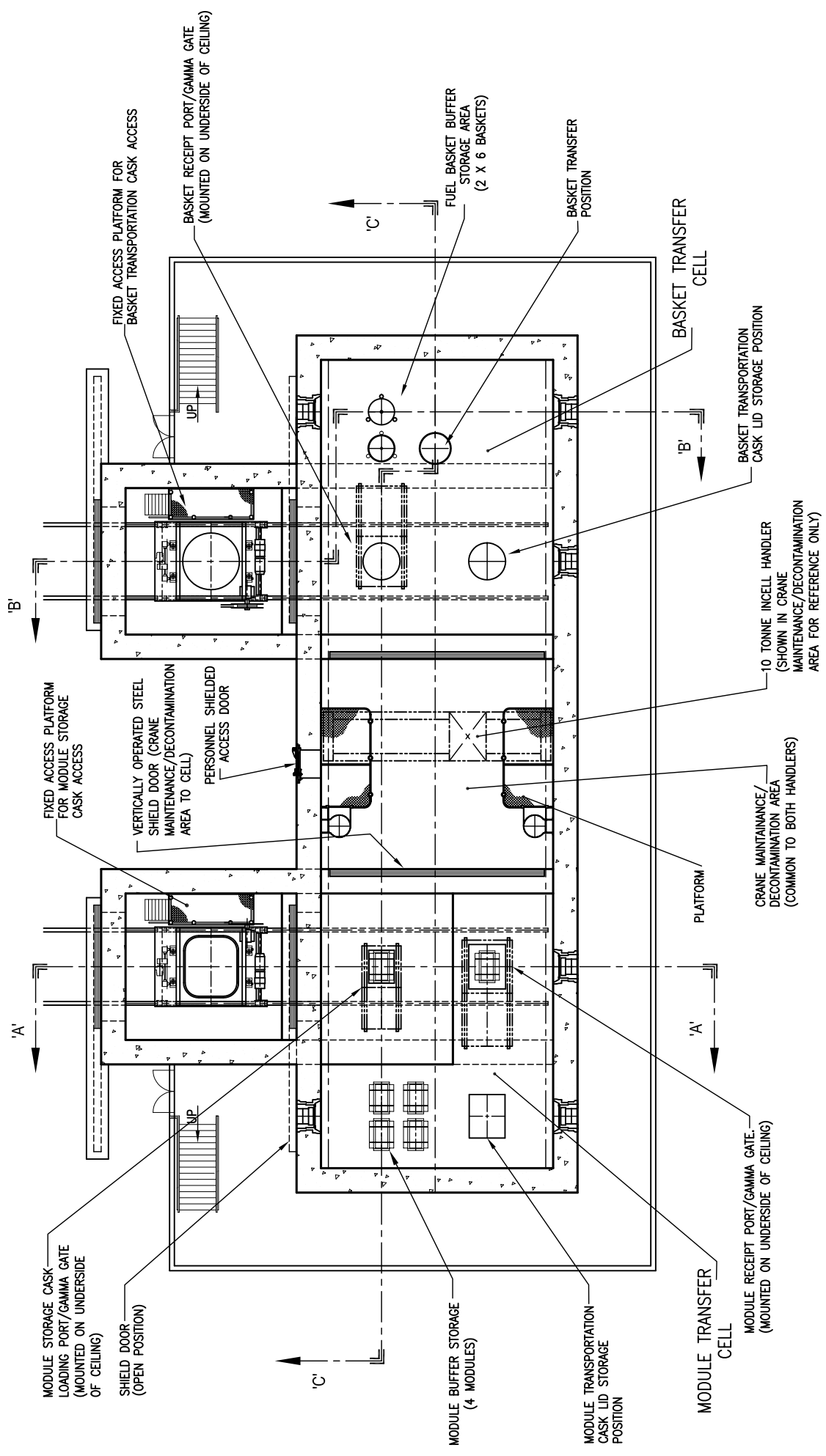


FIGURE 3.2

SHIELDED CELL LAYOUT  
CASKS AND VAULTS IN SHALLOW TRENCHES.



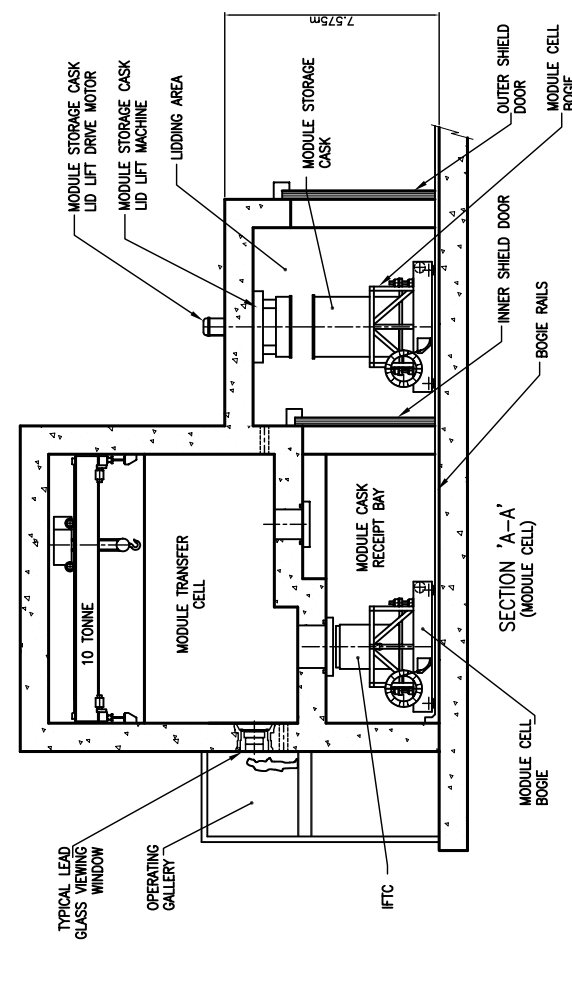
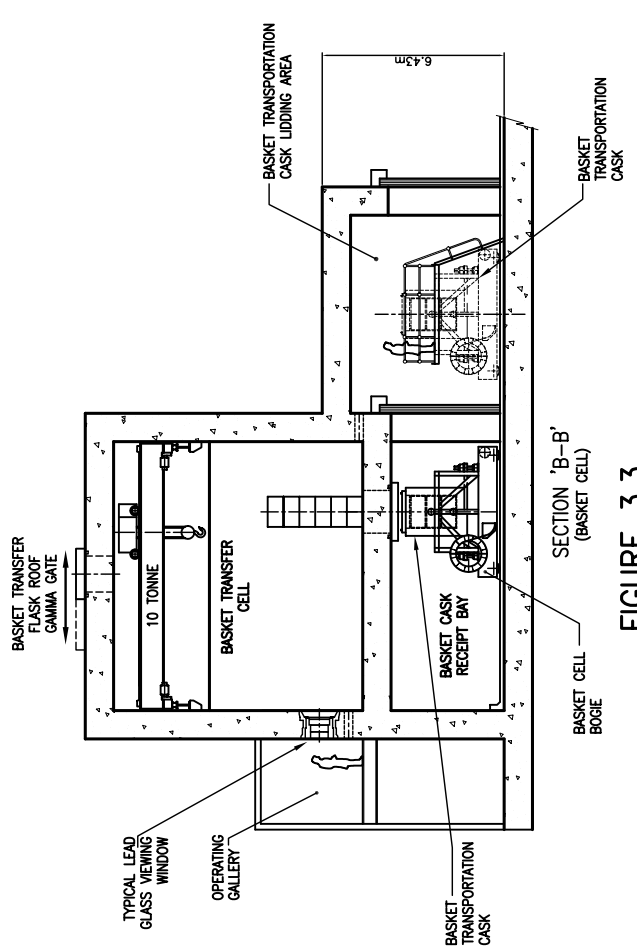
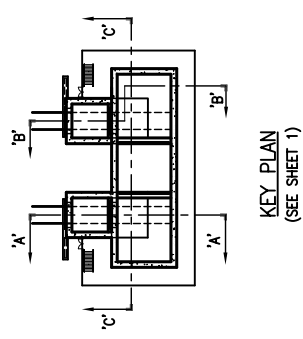
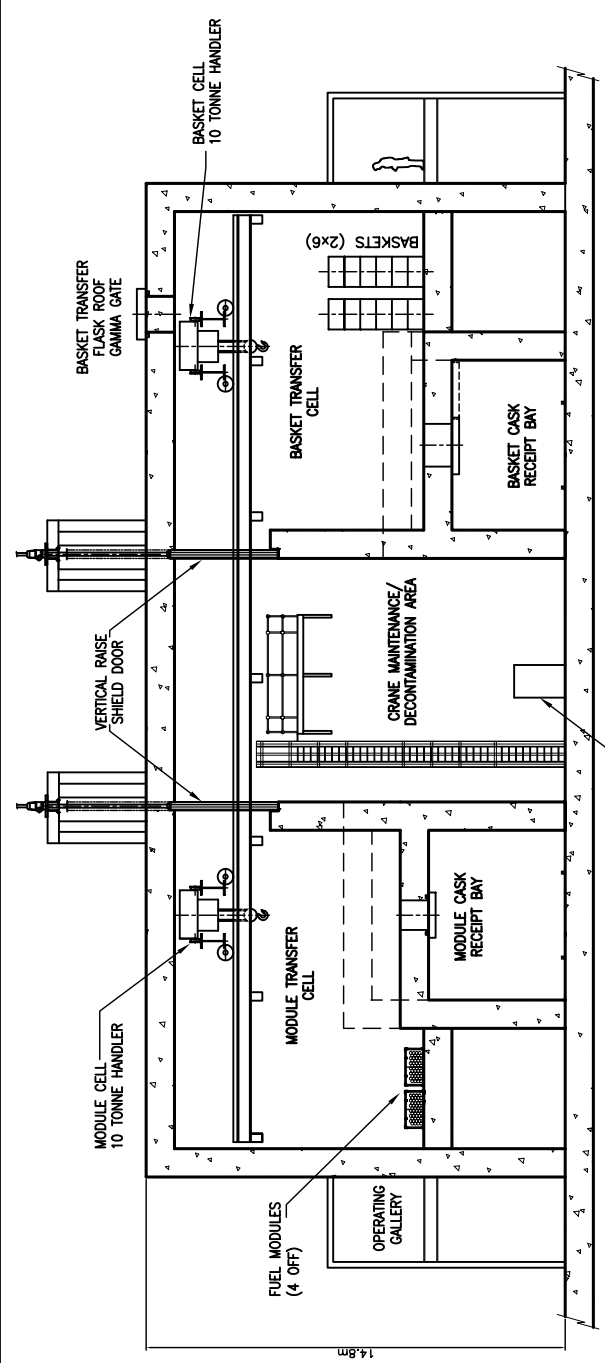
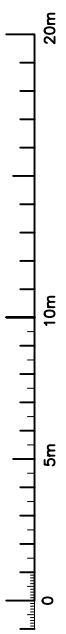
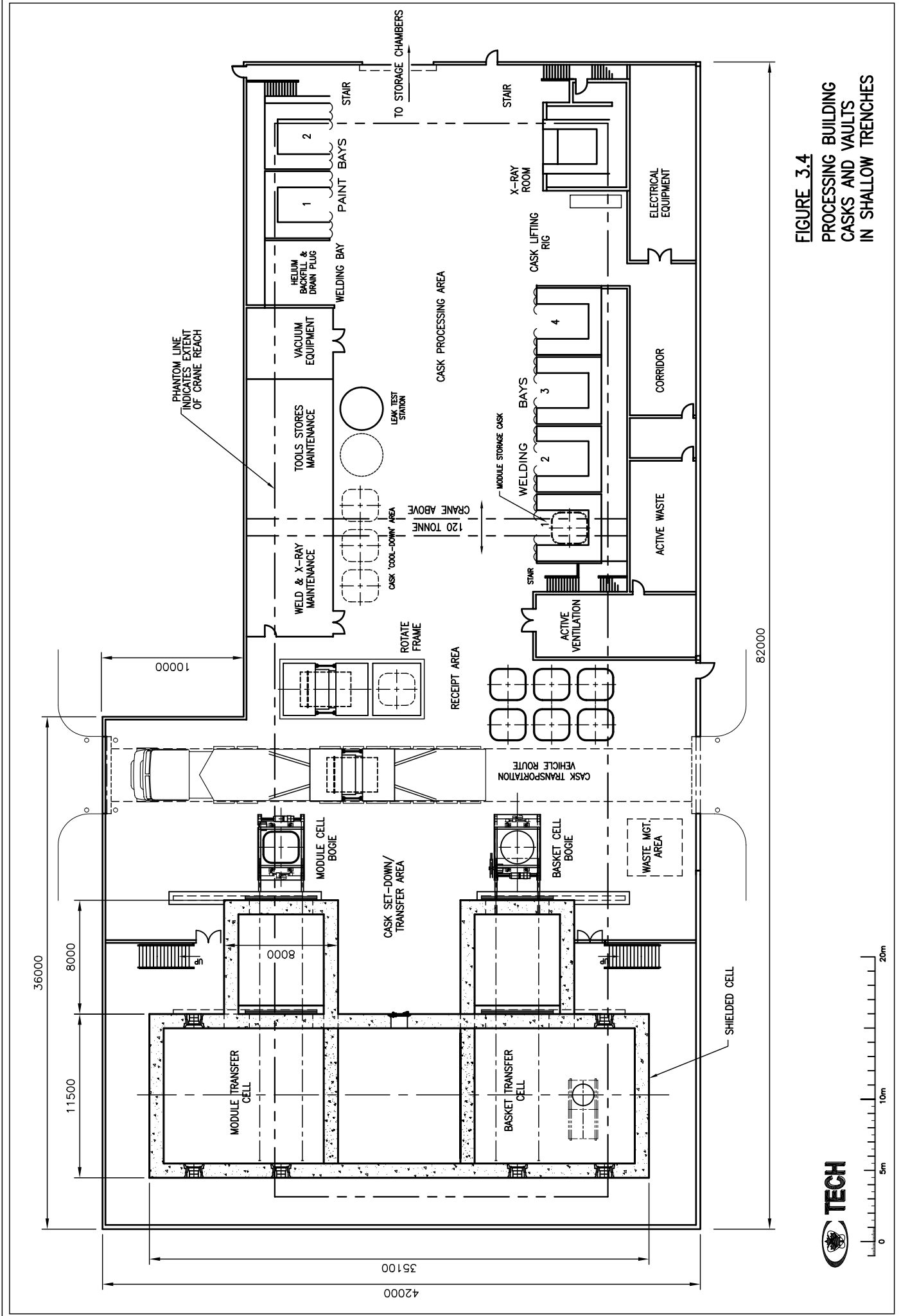


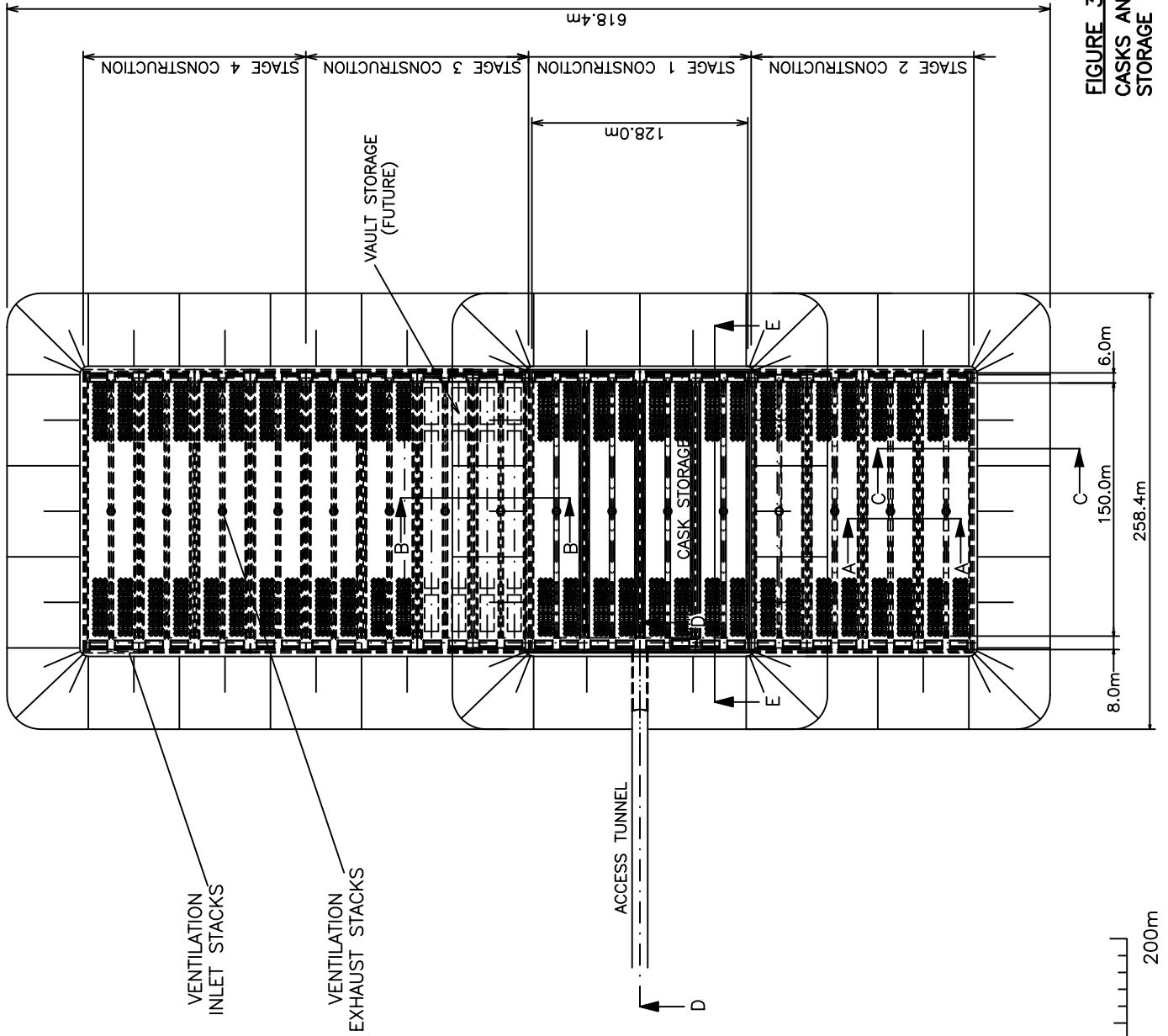
FIGURE 3.3

SHIELDED CELL SECTIONS  
CASKS AND VAULTS IN SHALLOW TRENCHES.



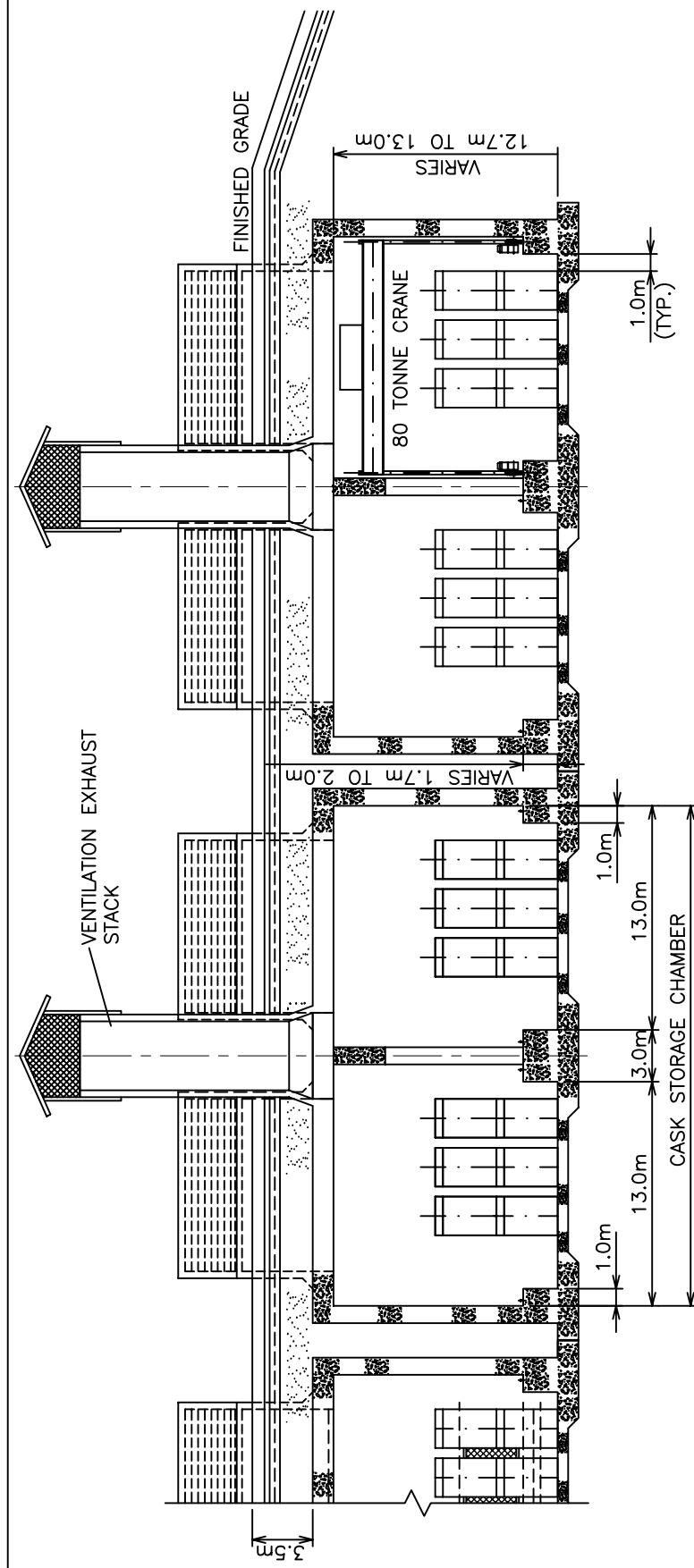


**FIGURE 3.4**  
**PROCESSING BUILDING**  
**CASKS AND VAULTS**  
**IN SHALLOW TRENCHES**

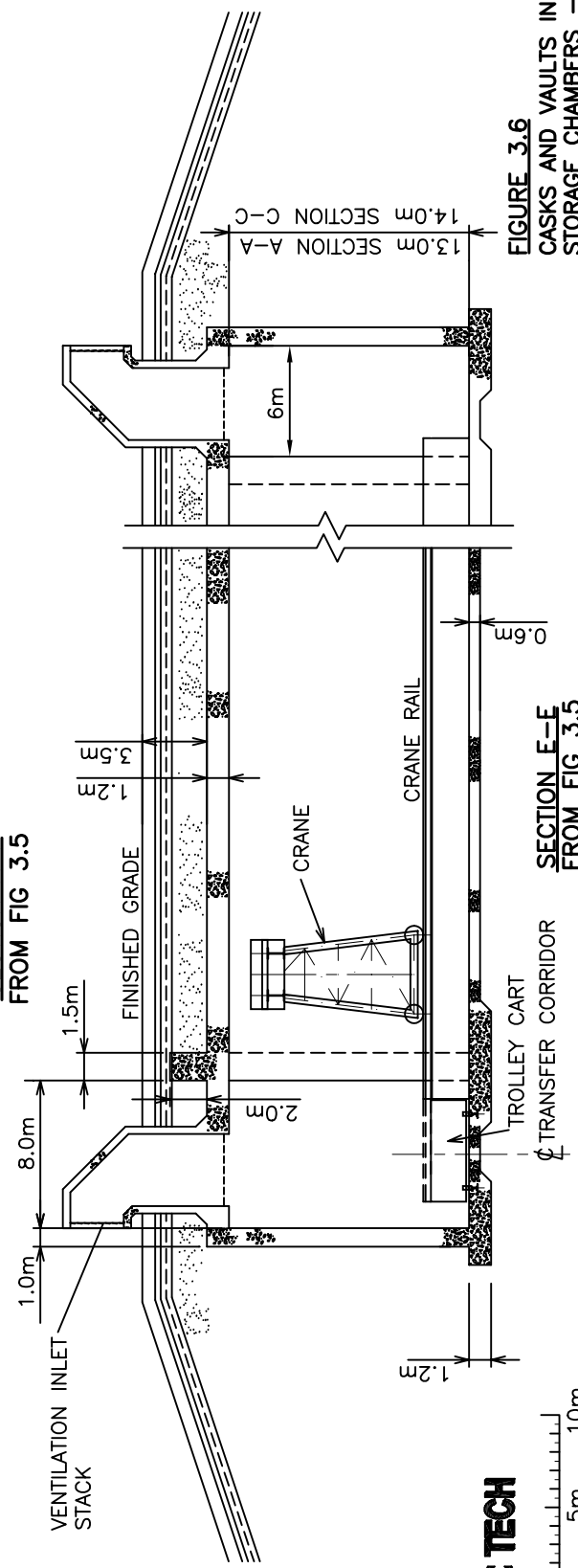


**FIGURE 3.5**  
**CASKS AND VAULTS IN SHALLOW TRENCHES**  
**STORAGE CHAMBERS - PLAN**





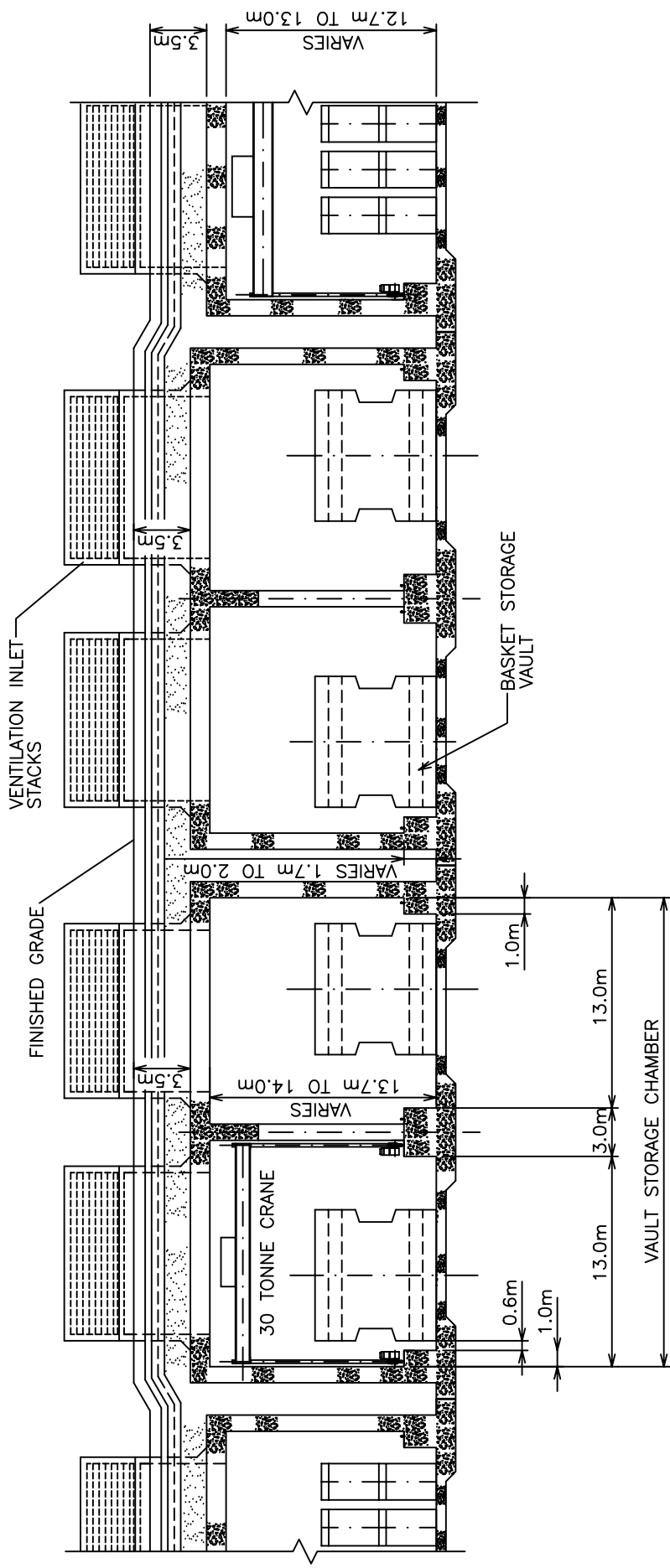
SECTION A-A  
FROM FIG 3.5



SECTION E-E  
FROM FIG 3.5



FIGURE 3.6  
CASKS AND VAULTS IN SHALLOW TRENCHES  
STORAGE CHAMBERS - PART ELEVATION



SECTION B-B  
FROM FIGURE 3.5

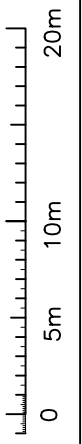
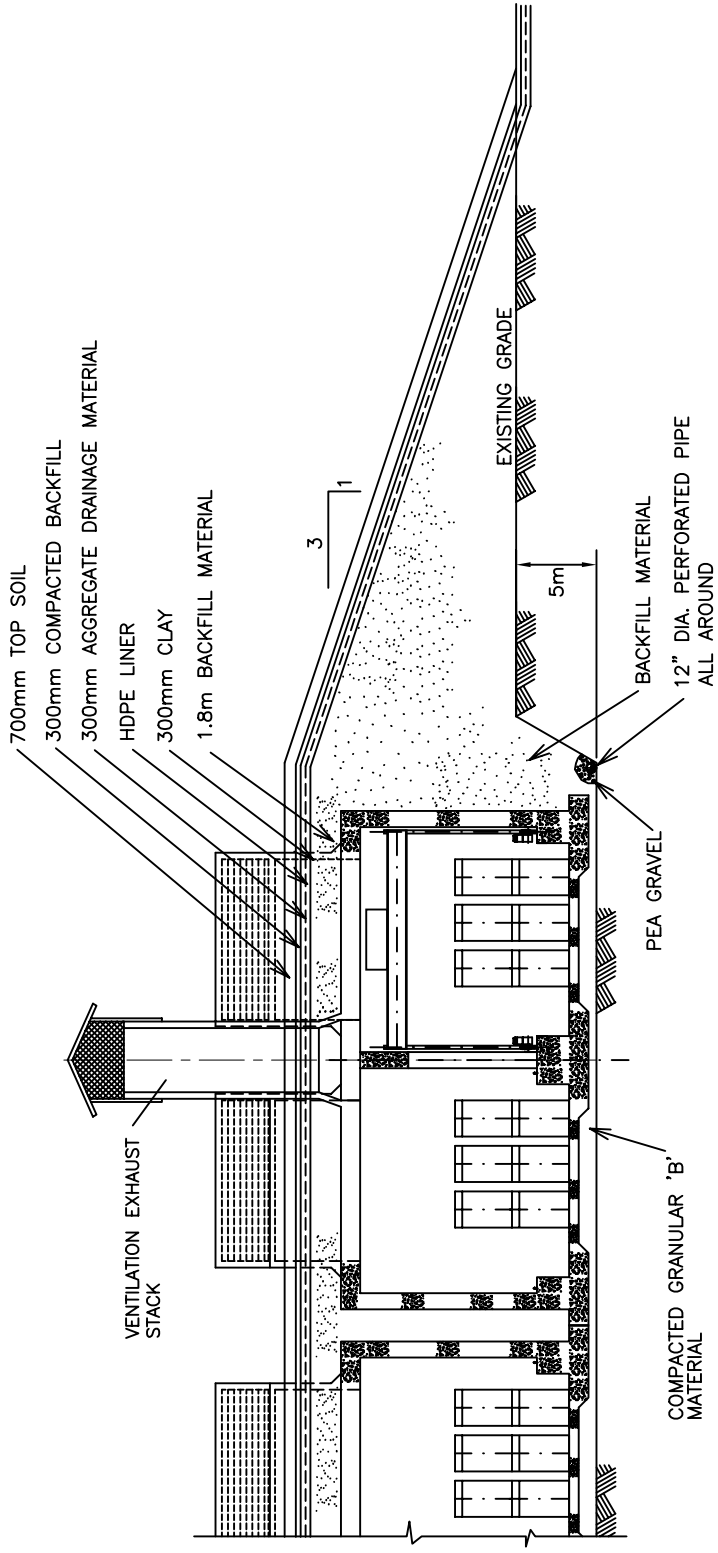
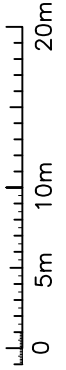


FIGURE 3.7  
CASKS AND VAULTS IN SHALLOW TRENCHES  
STORAGE CHAMBERS - PART ELEVATION

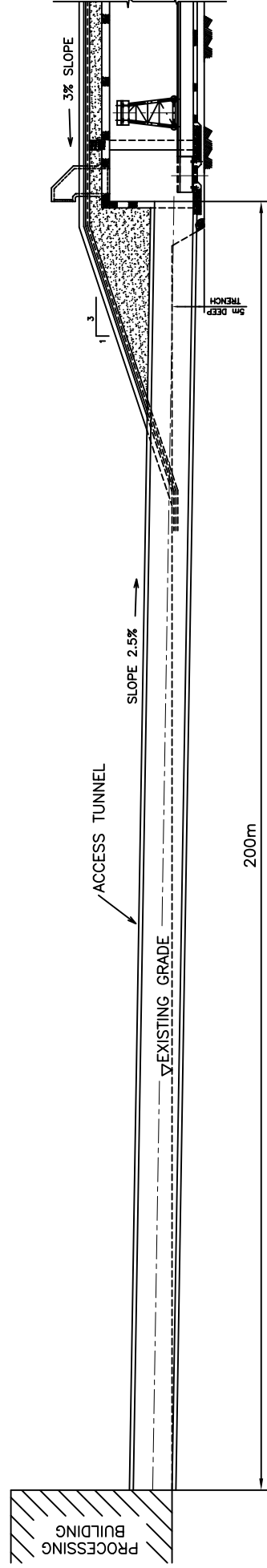


SECTION C-C  
FROM FIG 3.5

FIGURE 3.8  
CASKS AND VAULTS IN SHALLOW TRENCHES  
STORAGE CHAMBERS - PART ELEVATION



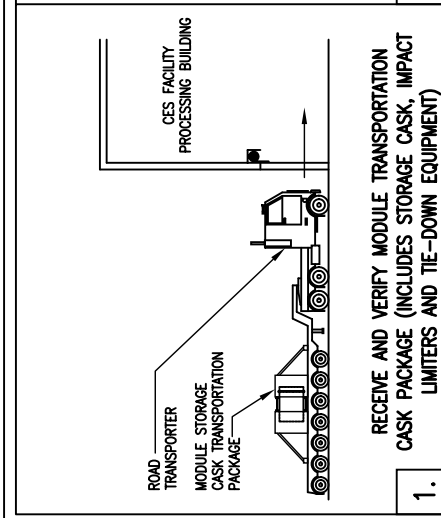




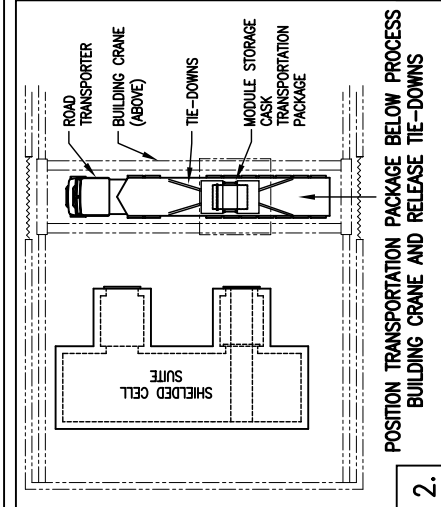
SECTION D-D  
FROM FIG 3.5

FIGURE 3.9  
CASKS AND VAULTS IN SHALLOW TRENCHES  
STORAGE CHAMBERS ACCESS TUNNEL – PART ELEVATION

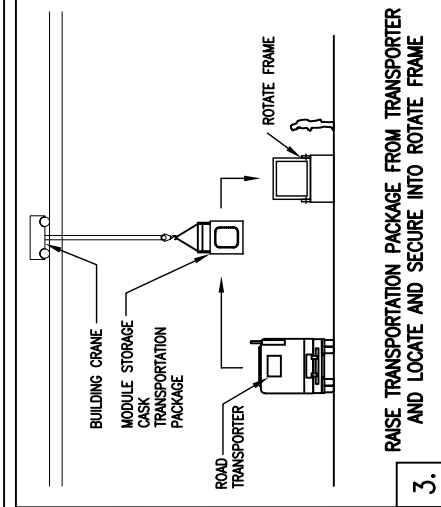




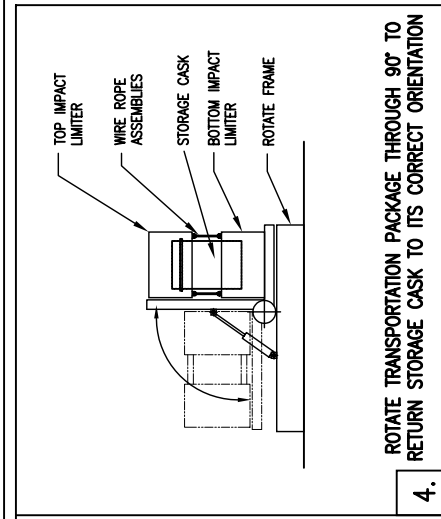
1. RECEIVE AND VERIFY MODULE TRANSPORTATION CASK PACKAGE (INCLUDES STORAGE CASK, IMPACT LIMITERS AND TIE-DOWN EQUIPMENT)



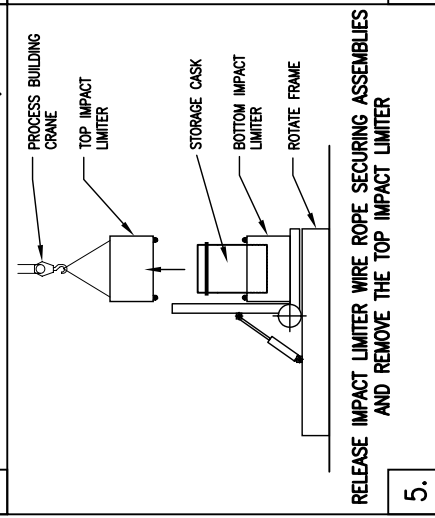
2. POSITION TRANSPORTATION PACKAGE BELOW PROCESS BUILDING CRANE AND RELEASE TIE-DOWNS



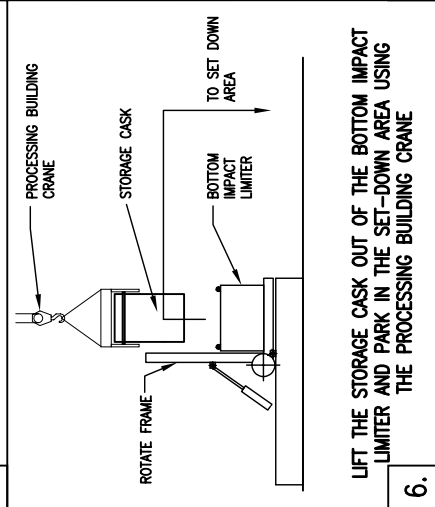
3. RAISE TRANSPORTATION PACKAGE FROM TRANSPORTER AND LOCATE AND SECURE INTO ROTATE FRAME



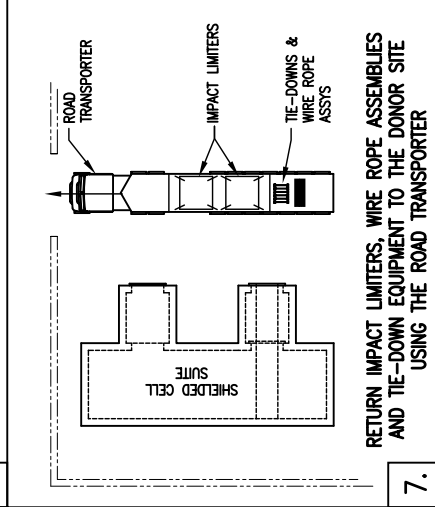
4. ROTATE TRANSPORTATION PACKAGE THROUGH 90° TO RETURN STORAGE CASK TO ITS CORRECT ORIENTATION



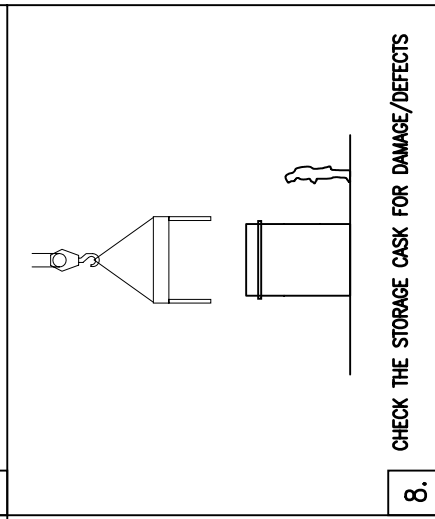
5. RELEASE IMPACT LIMITER WIRE ROPE SECURING ASSEMBLIES AND REMOVE THE TOP IMPACT LIMITER



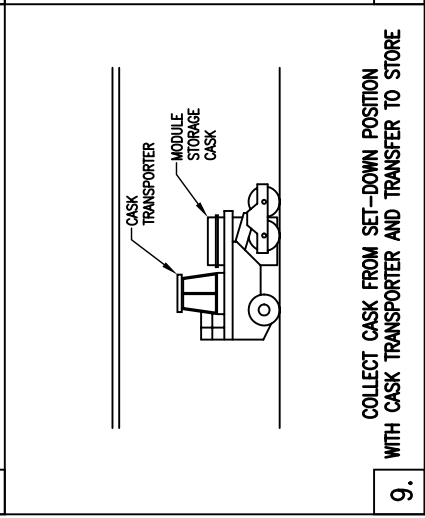
6. LIFT THE STORAGE CASK OUT OF THE BOTTOM IMPACT LIMITER AND PARK IN THE SET-DOWN AREA USING THE PROCESSING BUILDING CRANE



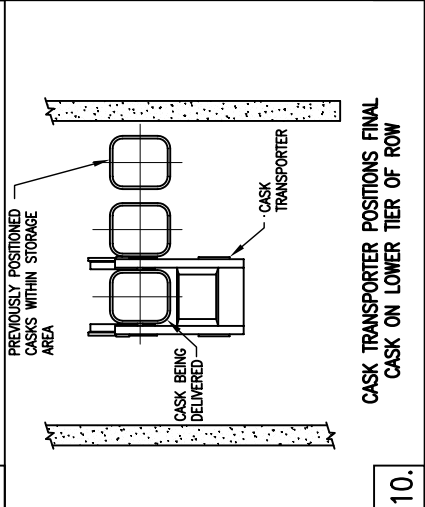
7. RETURN IMPACT LIMITERS, WIRE ROPE ASSEMBLIES AND TIE-DOWN EQUIPMENT TO THE DONOR SITE USING THE ROAD TRANSPORTER



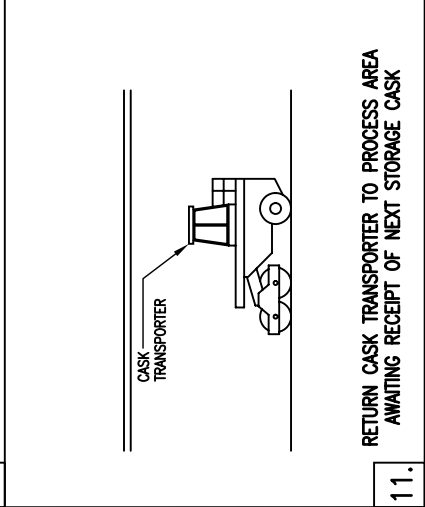
8. CHECK THE STORAGE CASK FOR DAMAGE/DEFECTS



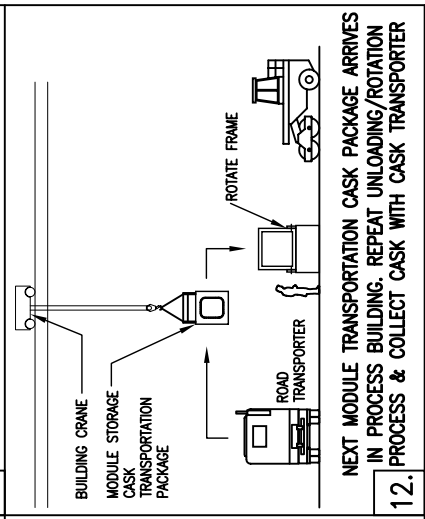
9. COLLECT CASK FROM SET-DOWN POSITION WITH CASK TRANSPORTER AND TRANSFER TO STORE



10. CASK TRANSPORTER POSITIONS FINAL CASK ON LOWER TIER OF ROW



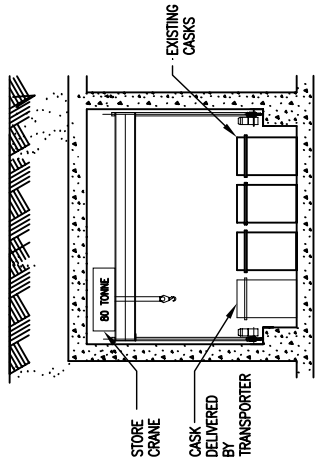
11. RETURN CASK TRANSPORTER TO PROCESS AREA AWAITING RECEIPT OF NEXT STORAGE CASK



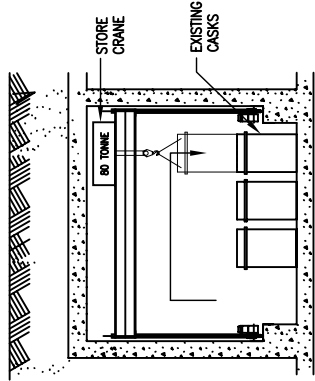
12. NEXT MODULE TRANSPORTATION CASK PACKAGE ARRIVES IN PROCESS BUILDING. REPEAT UNLOADING/ROTATION PROCESS & COLLECT CASK WITH CASK TRANSPORTER

FIGURE 3.10 (SHEET 1 OF 2)  
SEQUENCE DIAGRAM  
CASKS AND VAULTS IN SHALLOW TRENCHES  
EXISTING CASK, RECEIPT AND EMPACEMENT

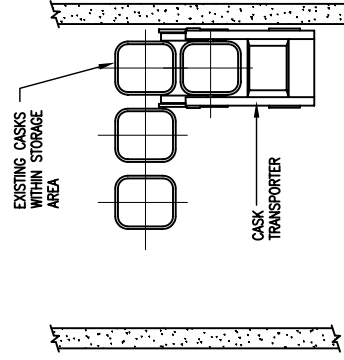




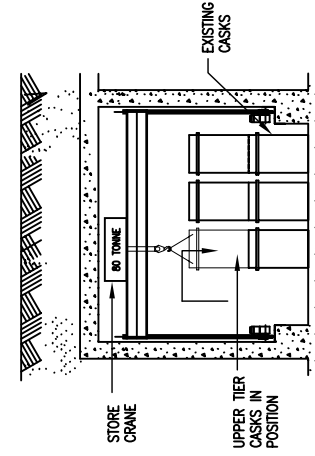
13. CASK TRANSPORTER DELIVERS 4TH CASK TO TRANSFER POSITION BELOW STORE CRANE



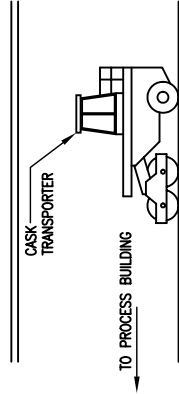
14. CASK TRANSFERRED TO UPPER TIER STORAGE POSITION



15. LOADING SEQUENCE CONTINUED WITH CASK TRANSPORTER POSITIONING LOWER CASKS

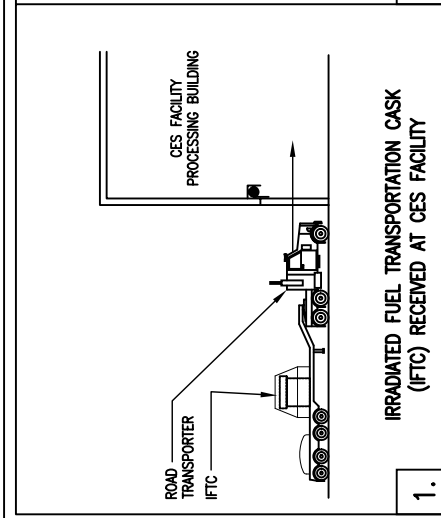


16. REMAINING UPPER TIER CASKS DELIVERED BY CASK TRANSPORTER AND POSITIONED BY STORE CRANE

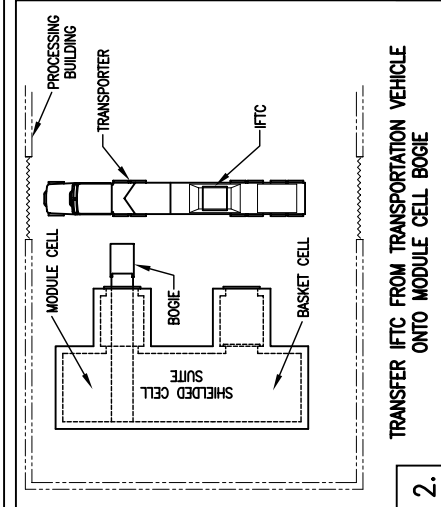


17. RETURN CASK TRANSPORTER TO PROCESS AREA AWAITING RECEIPT OF NEXT STORAGE CASK

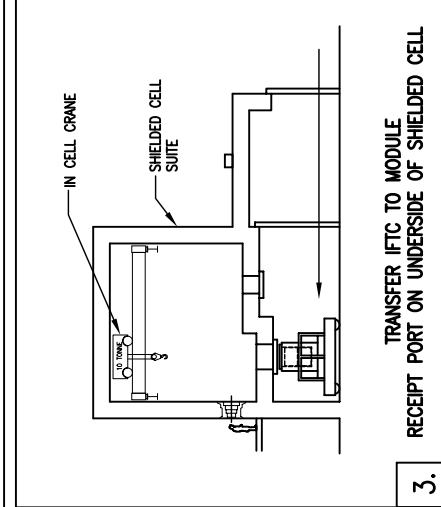
FIGURE 3.10 (SHEET 2 OF 2)  
SEQUENCE DIAGRAM  
CASKS AND VAULTS IN SHALLOW TRENCHES  
EXISTING CASK, RECEIPT AND EMPLACEMENT



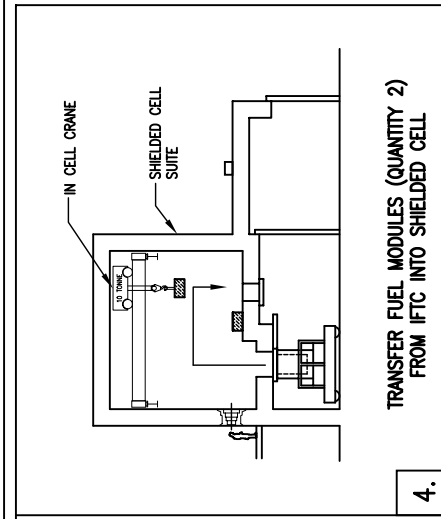
1. IRRADIATED FUEL TRANSPORTATION CASK (IFTC) RECEIVED AT CES FACILITY



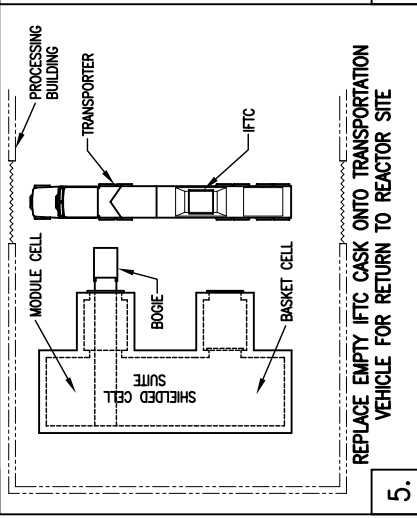
2. TRANSFER IFTC FROM TRANSPORTATION VEHICLE ONTO MODULE CELL BOGIE



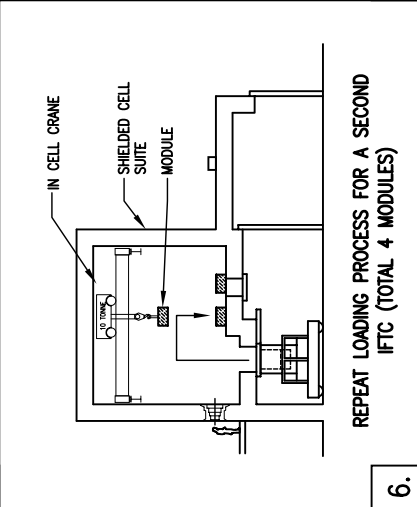
3. RECEIPT PORT ON UNDERSIDE OF SHIELDED CELL



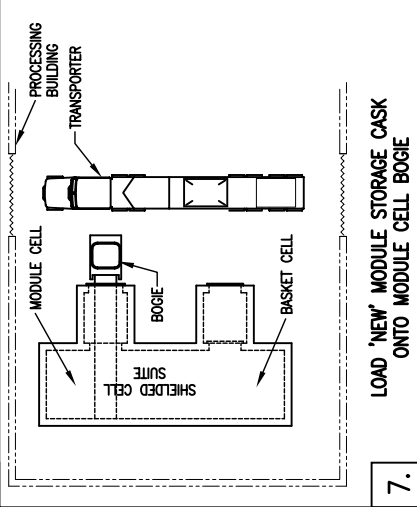
4. TRANSFER FUEL MODULES (QUANTITY 2) FROM IFTC INTO SHIELDED CELL



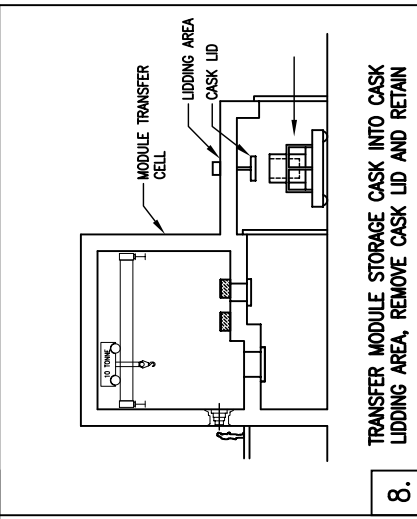
5. REPLACE EMPTY IFTC CASK ONTO TRANSPORTATION VEHICLE FOR RETURN TO REACTOR SITE



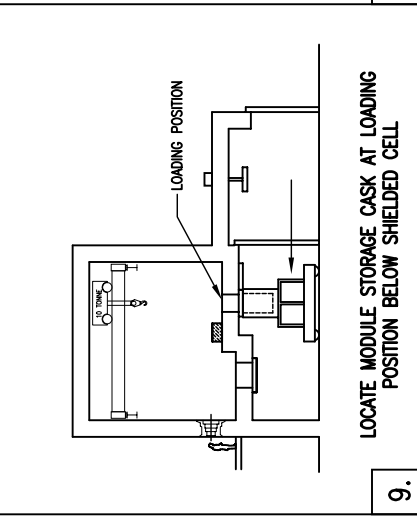
6. REPEAT LOADING PROCESS FOR A SECOND IFTC (TOTAL 4 MODULES)



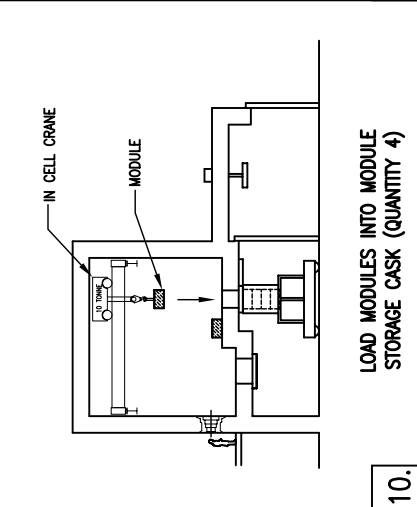
7. LOAD 'NEW' MODULE STORAGE CASK ONTO MODULE CELL BOGIE



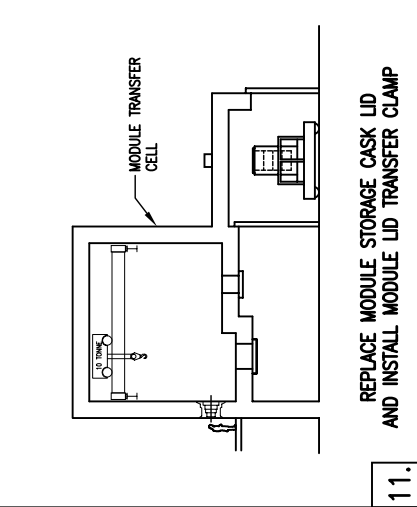
8. TRANSFER MODULE STORAGE CASK INTO CASK LIDDING AREA, REMOVE CASK LID AND RETAIN



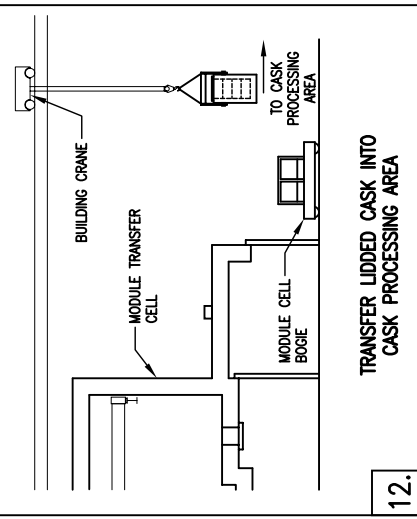
9. LOCATE MODULE STORAGE CASK AT LOADING POSITION BELOW SHIELDED CELL



10. LOAD MODULES INTO MODULE STORAGE CASK (QUANTITY 4)



11. REPLACE MODULE STORAGE CASK LID AND INSTALL MODULE LID TRANSFER CLAMP

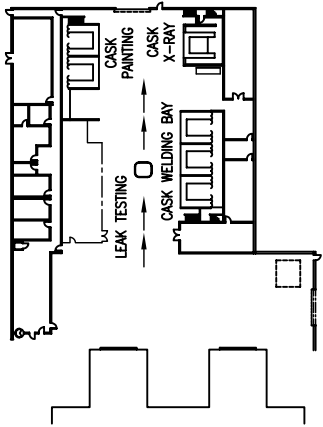


12. TRANSFER LIDDED CASK INTO CASK PROCESSING AREA

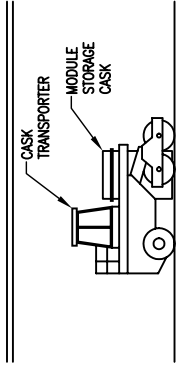
FIGURE 3.11 (SHEET 1 OF 2)

SEQUENCE DIAGRAM  
CASKS AND VAULTS IN SHALLOW TRENCHES  
CASK LOADING AND EMPLACEMENT

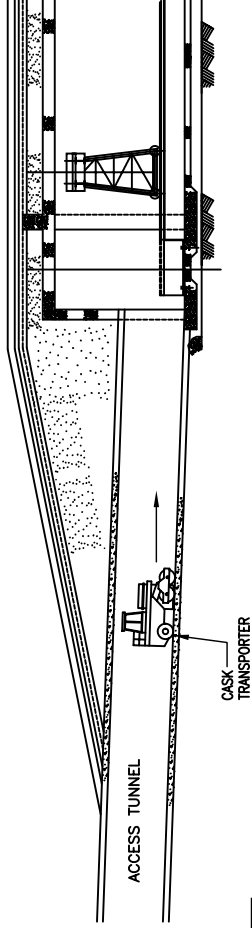




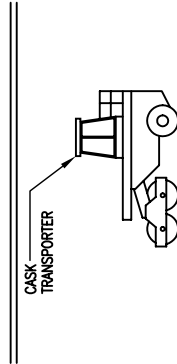
13. MODULE STORAGE CASK PROGRESSED THROUGH CASK CLOSURE INSPECTION AND VALIDATION OPERATIONS



14. COMPLETED CASK COLLECTED BY CASK TRANSPORTER

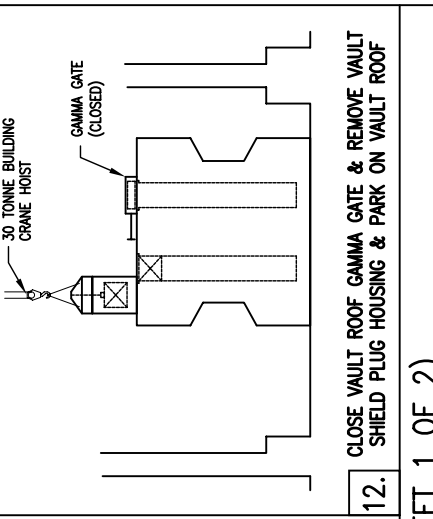
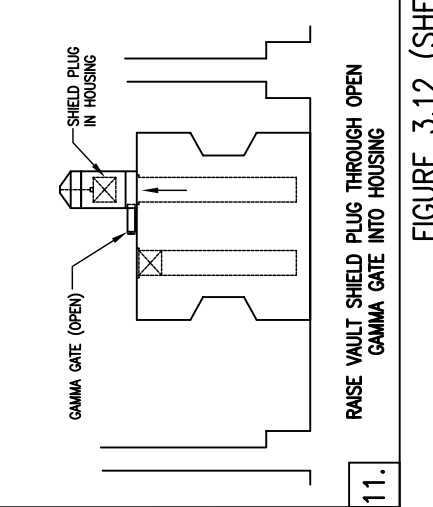
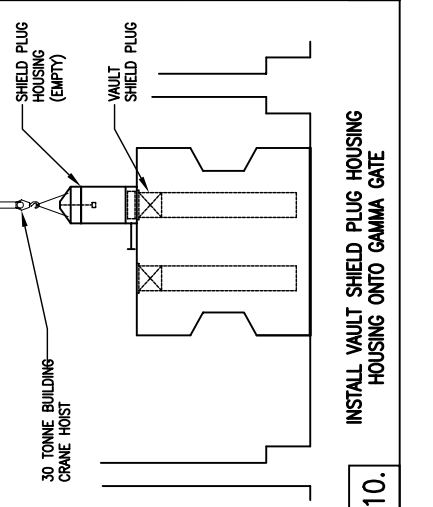
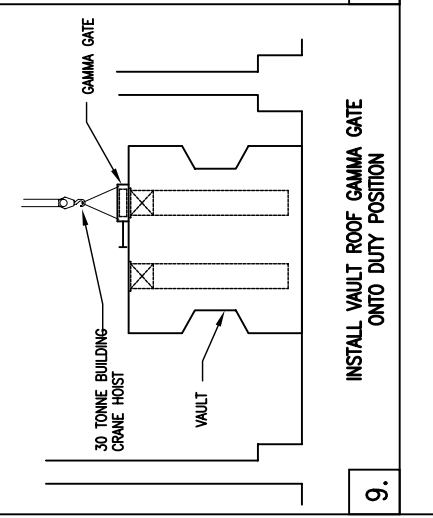
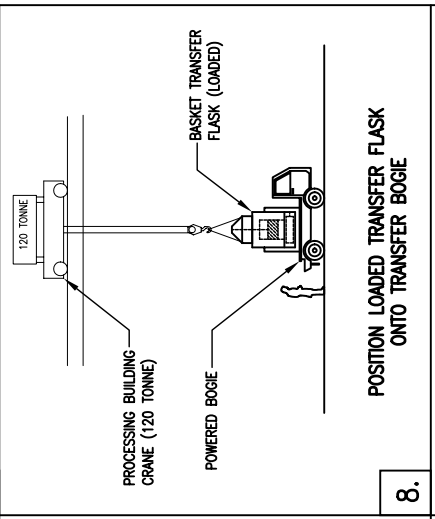
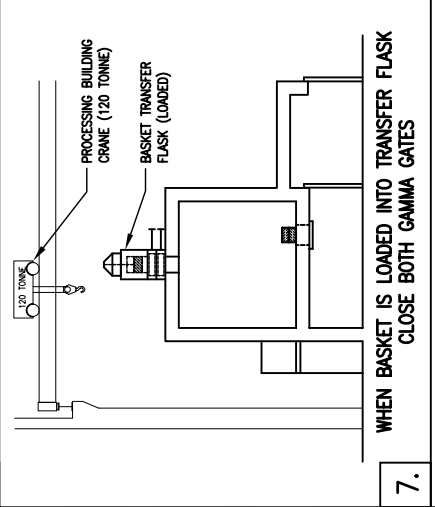
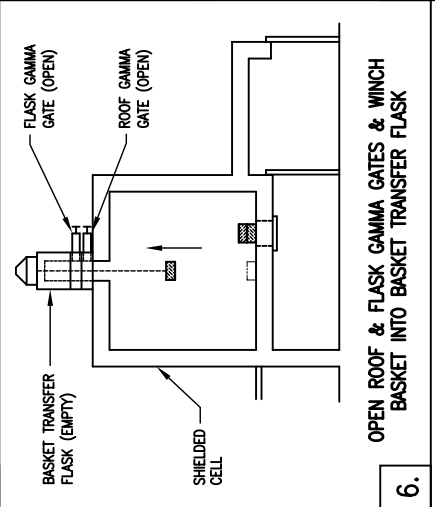
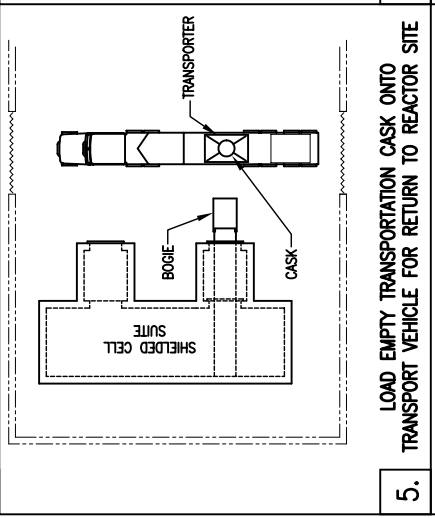
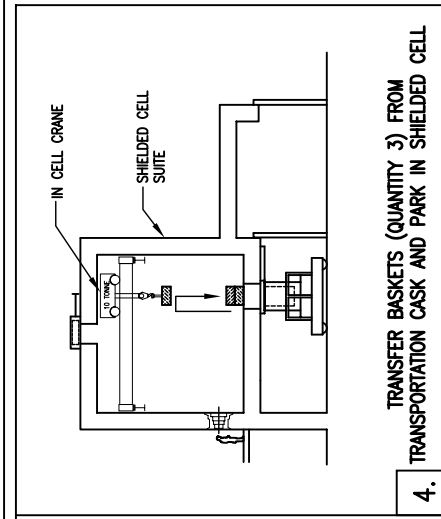
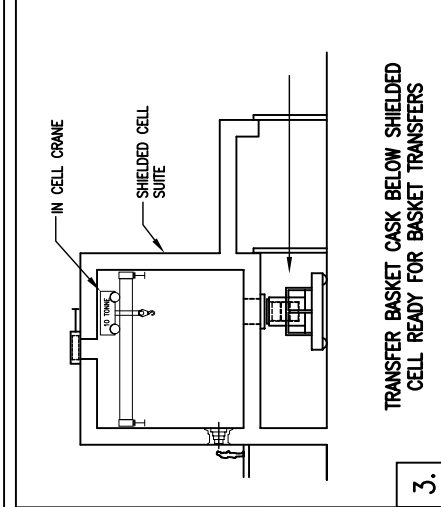
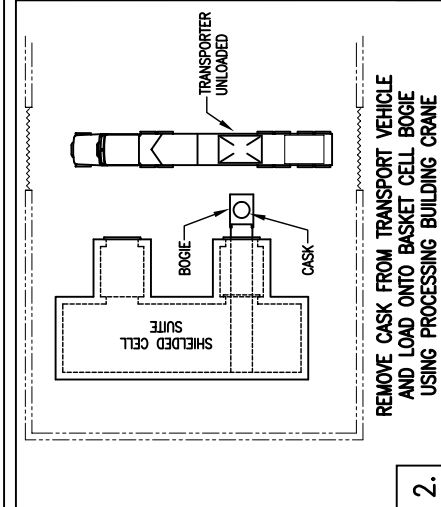
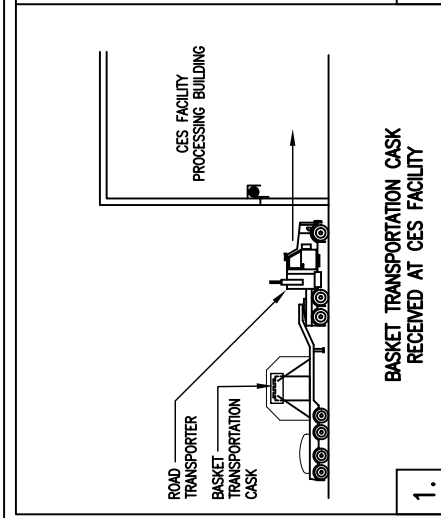


15. CASK POSITIONED WITHIN SHALLOW TRENCH



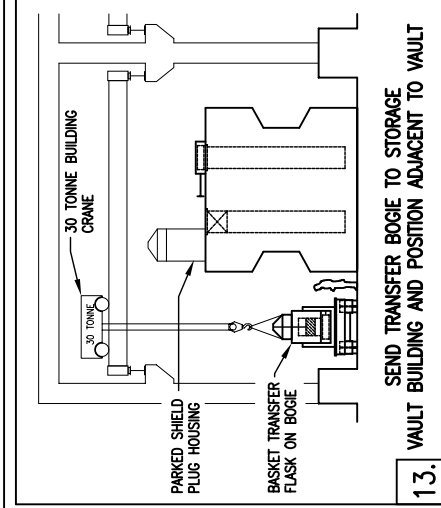
16. RETURN CASK TRANSPORTER TO PROCESS AREA AWAITING RECEIPT OF NEXT STORAGE CASK

FIGURE 3.11 (SHEET 2 OF 2)  
SEQUENCE DIAGRAM  
CASKS AND VAULTS IN SHALLOW TRENCHES  
CASK LOADING AND EMPLACEMENT

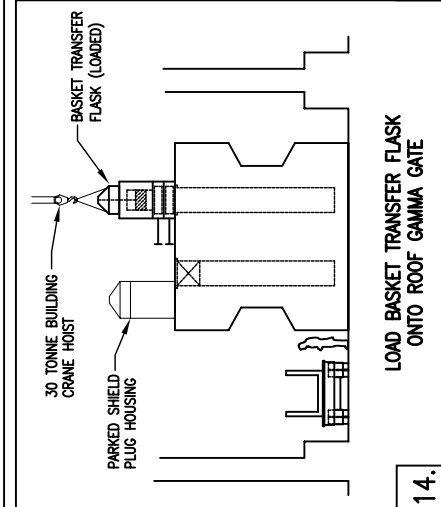


**FIGURE 3.12 (SHEET 1 OF 2)**  
**SEQUENCE DIAGRAM**  
**CASKS AND VAULTS IN SHALLOW TRENCHES**  
**VAULT LOADING, BASKET RECEIPT & EMPLOYMENT**

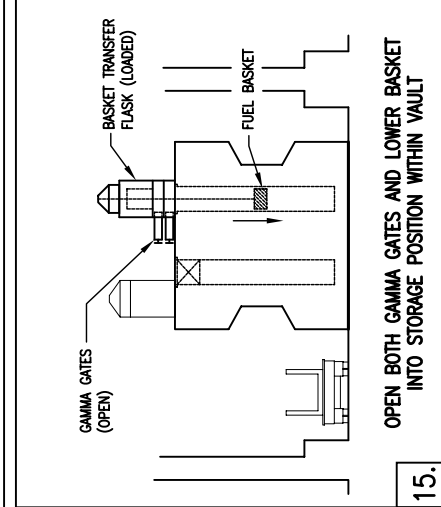




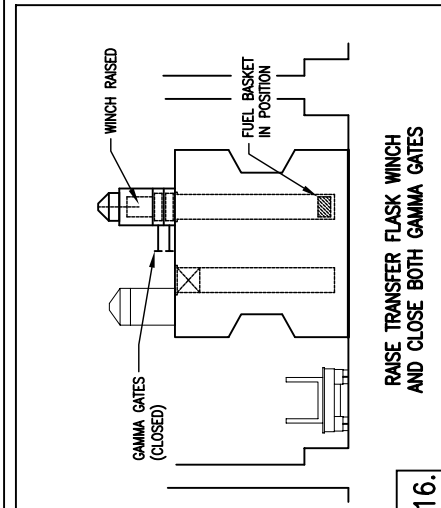
13. SEND TRANSFER BOGIE TO STORAGE VAULT BUILDING AND POSITION ADJACENT TO VAULT



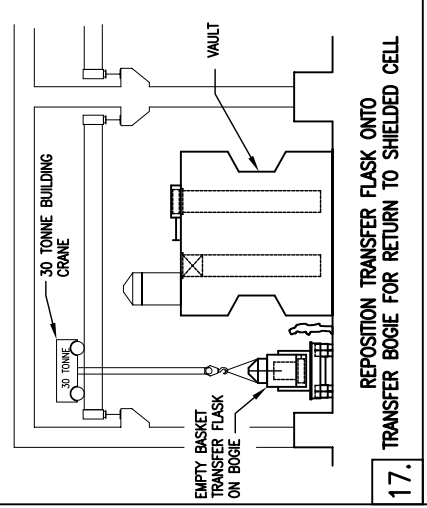
14. LOAD BASKET TRANSFER FLASK ONTO ROOF GAMMA GATE



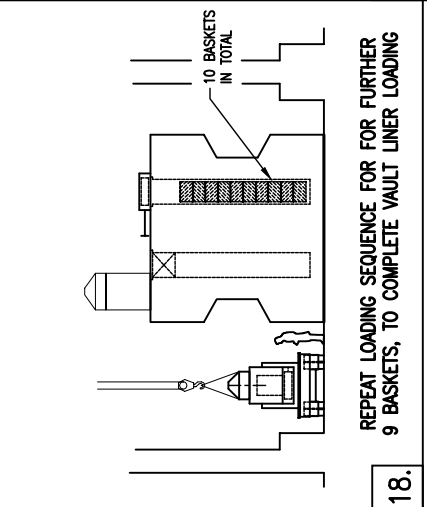
15. OPEN BOTH GAMMA GATES AND LOWER BASKET INTO STORAGE POSITION WITHIN VAULT



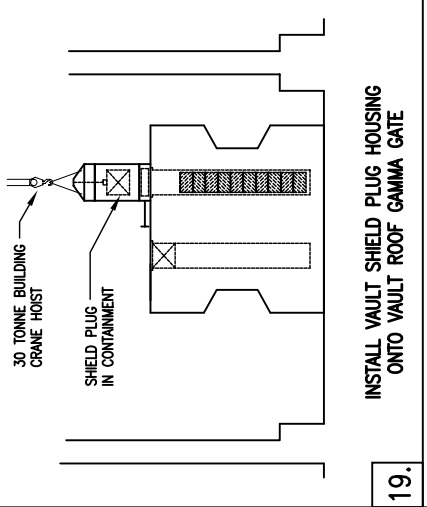
16. RAISE TRANSFER FLASK WINCH AND CLOSE BOTH GAMMA GATES



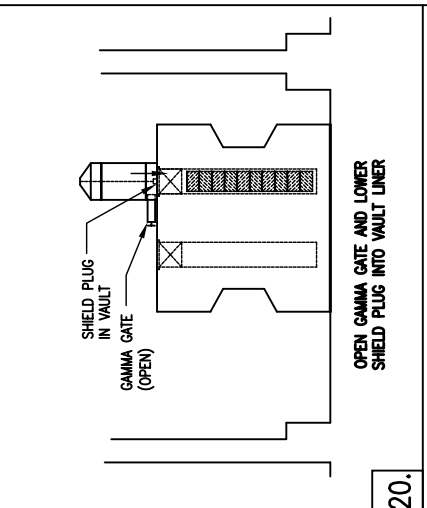
17. REPOSITION TRANSFER FLASK ONTO TRANSFER BOGIE FOR RETURN TO SHIELDED CELL



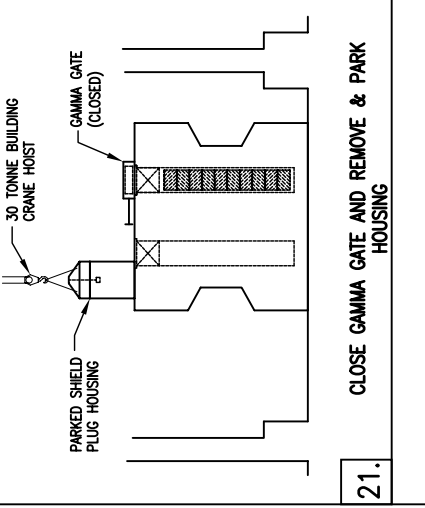
18. REPEAT LOADING SEQUENCE FOR FURTHER 9 BASKETS, TO COMPLETE VAULT LINER LOADING



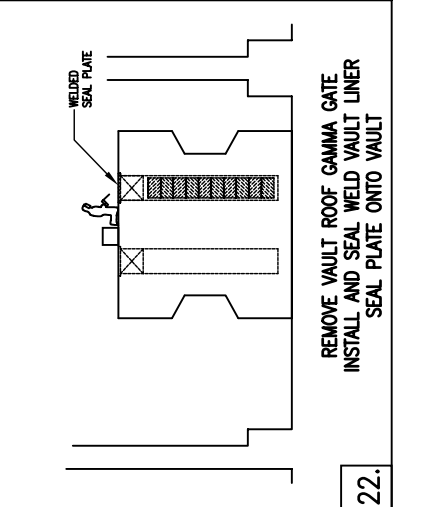
19. INSTALL VAULT SHIELD PLUG HOUSING ONTO VAULT ROOF GAMMA GATE



20. OPEN GAMMA GATE AND LOWER SHIELD PLUG INTO VAULT LINER



21. CLOSE GAMMA GATE AND REMOVE & PARK SHIELD PLUG HOUSING



22. REMOVE VAULT ROOF GAMMA GATE SEAL AND SEAL WELD VAULT LINER SEAL PLATE ONTO VAULT

FIGURE 3.12 (SHEET 2 OF 2)

SEQUENCE DIAGRAM  
CASKS AND VAULTS IN SHALLOW TRENCHES  
VAULT LOADING, BASKET RECEIPT & EMBLEMMENT

