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UNITED STATES DEPARTMENT OF ENERGY

RICHLAND OPERATIONS OFFICE

Richland, Washington

DEC 1990
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EDMC

# DETAILED DESIGN

# GENERAL ARRANGEMENT DRAWINGS

HANFORD WASTE VITRIFICATION PLANT

PROJECT B-595

DOE CONTRACT NO.
DE-AC06-86RL10838

FLUOR DANIEL
CONTRACT 8457

[redacted]

START

12099 262

UNITED STATES DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
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# GENERAL ARRANGEMENT DRAWINGS

HANFORD WASTE VITRIFICATION PLANT
PROJECT B-595

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CONTRACT 8457

[redacted]

**U.S. DEPARTMENT OF ENERGY**
Hanford Waste Vitrification Plant
Richland, Washington
DOE Contract DE-AC06-86RL10838

**FLUOR DANIEL, INC.**
Advanced Technology Division
Fluor Contract 8457

DETAILED DESIGN PROJECT BASELINE CONTROL GENERAL ARRANGEMENT DRAWINGS

[redacted]

(Title of Document)

ISSUED TO:

WHC - ENVIROMENTAL
(Name)

WHC
(Organization)

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EDC, B3J
Fluor Daniel, Inc.
3333 Michelson Drive
Irvine, CA 92730

GA INDEX

| DRAWING NUMBER | SHT NUMBER | DRAWING TITLE | REV |
|---|---|---|---|
| H-2-117100 | 01 | FINAL SITE PLANS TITLE SHEET | 0 |
| H-2-117101 | 01 | FINAL SITE PLAN DRAWING INDEX | 0 |
| H-2-117102 | 01 | FINAL SITE PLANS LEGEND ABBREVIATIONS INDEX AND GENERAL NOTES | 0 |
| H-2-117103 | 01 | OVERALL FINAL SITE FINISH PAVING PLAN | 0 |
| H-2-117104 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117105 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117106 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117107 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117108 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117109 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117110 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117111 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117112 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117113 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117114 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117115 | 01 | FINAL SITE GRADING AND UTILITIES PLAN | 0 |
| H-2-117120 | 01 | FINAL SITE PLAN SECTIONS AND DETAILS | 0 |
| H-2-117121 | 01 | FINAL SITE PLAN SECTIONS AND DETAILS | 0 |
| H-2-117200 | 01 | CONSTRUCTION SUPPORT FACILITIES TITLE SHEET | 0 |
| H-2-117201 | 01 | CONSTRUCTION SUPPORT FACILITIES DRAWING INDEX | 0 |
| H-2-117202 | 01 | CONSTRUCTION SUPPORT FACILITIES LEGEND ABBREVIATIONS INDEX AND GENERAL NOTES | 0 |
| H-2-117203 | 01 | OVERALL CONSTRUCTION SUPPORT FACILITIES PAVING PLAN | 0 |
| H-2-117204 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117205 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117206 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117207 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117208 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117209 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117210 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117211 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117212 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117213 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117214 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117215 | 01 | CONSTRUCTION SUPPORT FACILITIES SITE LAYOUT AND UTILITIES PLAN | 0 |
| H-2-117220 | 01 | CONSTRUCTION SUPPORT FACILITIES SECTIONS AND DETAILS | 0 |
| H-2-117221 | 01 | CONSTRUCTION SUPPORT FACILITIES SECTIONS AND DETAILS | 0 |
| H-2-117000 | 01 | GENERAL ARRANGEMENT DRAWINGS TITLE SHEET | 0 |
| H-2-117001 | 01 | GENERAL ARRANGEMENT GENERAL NOTES & LEGEND | 0 |
| H-2-117020 | 01 | GENERAL ARRANGEMENT COOLING TOWER FOUNDATION-PLANS AND DETAILS | 0 |
| H-2-117025 | 01 | GENERAL ARRANGEMENT HVAC STACKS AND DUCTS | 0 |
| H-2-118021 | 01 | GA VITRIFICATION BUILDING TUNNEL PLAN - SOUTH END | 0 |
| H-2-118022 | 01 | GA VITRIFICATION BUILDING TUNNEL PLAN - NORTH END | 0 |
| H-2-118023 | 01 | GA VITRIFICATION BUILDING FIRST FLOOR PLAN - SOUTH END | 0 |
| H-2-118024 | 01 | GA VITRIFICATION BUILDING FIRST FLOOR PLAN - NORTH END | 0 |
| H-2-118025 | 01 | GA VITRIFICATION BUILDING MEZZANINE LEVEL PLAN - SOUTH END | 0 |
| H-2-118026 | 01 | GA VITRIFICATION BUILDING MEZZANINE LEVEL PLAN - NORTH END | 0 |
| H-2-118027 | 01 | GA VITRIFICATION BUILDING SECOND FLOOR PLAN - SOUTH END | 0 |
| H-2-118028 | 01 | GA VITRIFICATION BUILDING SECOND FLOOR PLAN - NORTH END | 0 |
| H-2-118029 | 01 | GA VITRIFICATION BUILDING THIRD FLOOR PLAN - SOUTH END | 0 |
| H-2-118030 | 01 | GA VITRIFICATION BUILDING THIRD FLOOR PLAN - NORTH END | 0 |

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| H-2-118031 | 01 | GA VITRIFICATION BUILDING 3RD FLOOR MEZZANINE & CRANE RAIL PLAN | 0 |
| H-2-118032 | 01 | GA VITRIFICATION BUILDING FOURTH FLOOR PLAN - SOUTH END | 0 |
| H-2-118033 | 01 | GA VITRIFICATION BUILDING FOURTH FLOOR PLAN - NORTH END | 0 |
| H-2-118034 | 01 | GA VITRIFICATION BUILDING ROOF PLAN - SOUTH END | 0 |
| H-2-118035 | 01 | GA VITRIFICATION BUILDING ROOF PLAN - NORTH END | 0 |
| H-2-118036 | 01 | GA VITRIFICATION BUILDING CONTACT MAINTENANCE ROOM DETAILS | 0 |
| H-2-118037 | 01 | GA VITRIFICATION BUILDING MISCELLANEOUS PLATFORMS | 0 |
| H-2-118038 | 01 | GA VITRIFICATION BUILDING TUNNEL LEVEL FLOOR PLAN AT SHIPPING AND RECEIVING AREAS | 0 |
| H-2-118039 | 01 | GA VITRIFICATION BUILDING FIRST FLOOR PLAN AT SHIPPING AND RECEIVING AREAS | 0 |
| H-2-118040 | 01 | GA VITRIFICATION BUILDING ROOF PLAN AT SHIPPING AND RECEIVING AREAS | 0 |
| H-2-118041 | 01 | GA VITRIFICATION BUILDING SECTION A | 0 |
| H-2-118042 | 01 | GA VITRIFICATION BUILDING SECTION B | 0 |
| H-2-118043 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION C - SOUTH END | 0 |
| H-2-118044 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION C - NORTH END | 0 |
| H-2-118045 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION D - SOUTH END | 0 |
| H-2-118046 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION D - NORTH END | 0 |
| H-2-118047 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION E - SOUTH END | 0 |
| H-2-118048 | 01 | GA VITRIFICATION BUILDING PARTIAL SECTION E - NORTH END | 0 |
| H-2-118049 | 01 | GA VITRIFICATION BUILDING EAST ELEVATION - SOUTH END | 0 |
| H-2-118050 | 01 | GA VITRIFICATION BUILDING EAST ELEVATION - NORTH END | 0 |
| H-2-118051 | 01 | GA VITRIFICATION BUILDING WEST ELEVATION - SOUTH END | 0 |
| H-2-118052 | 01 | GA VITRIFICATION BUILDING WEST ELEVATION - NORTH END | 0 |
| H-2-118053 | 01 | GA VITRIFICATION BUILDING SOUTH ELEVATION | 0 |
| H-2-118054 | 01 | GA VITRIFICATION BUILDING NORTH ELEVATION | 0 |
| H-2-118055 | 01 | GA VITRIFICATION BUILDING SECTION F & G | 0 |
| H-2-118056 | 01 | GA VITRIFICATION BUILDING SECTIONS AT SHIPPING AND RECEIVING AREAS | 0 |
| H-2-118057 | 01 | GA VITRIFICATION BUILDING ELEVATIONS AT SHIPPING & RECEIVING AREAS | 0 |
| H-2-118070 | 01 | GA MANIPULATOR REPAIR BUILDING BASEMENT PLAN | 0 |
| H-2-118071 | 01 | GA MANIPULATOR REPAIR BUILDING FIRST FLOOR PLAN | 0 |
| H-2-118072 | 01 | GA MANIPULATOR REPAIR BUILDING SECOND FLOOR PLAN | 0 |
| H-2-118073 | 01 | GA MANIPULATOR REPAIR BUILDING THIRD FLOOR PLAN | 0 |
| H-2-118074 | 01 | GA MANIPULATOR REPAIR BUILDING FOURTH FLOOR PLAN | 0 |
| H-2-118075 | 01 | GA MANIPULATOR REPAIR BUILDING FIFTH FLOOR PLAN | 0 |
| H-2-118076 | 01 | GA MANIPULATOR REPAIR BUILDING ROOF PLAN | 0 |
| H-2-118077 | 01 | GA MANIPULATOR REPAIR BUILDING EXTERIOR ELEVATIONS | 0 |
| H-2-118078 | 01 | GA MANIPULATOR REPAIR BUILDING EXTERIOR ELEV & BLDG SECTION | 0 |
| H-2-118080 | 01 | GA CANISTER STORAGE BUILDING BASEMENT PLAN | 0 |
| H-2-118081 | 01 | GA CANISTER STORAGE BUILDING FIRST FLOOR PLAN | 0 |
| H-2-118082 | 01 | GA CANISTER STORAGE BUILDING ROOF PLAN | 0 |
| H-2-118083 | 01 | GA CANISTER STORAGE BUILDING BUILDING SECTION | 0 |
| H-2-118084 | 01 | GA CANISTER STORAGE BUILDING PARTIAL SECTION & BUILDING SECTION | 0 |
| H-2-118085 | 01 | GA CANISTER STORAGE BUILDING NORTH & SOUTH ELEVATIONS | 0 |
| H-2-118086 | 01 | GA CANISTER STORAGE BUILDING EAST & WEST ELEVATIONS | 0 |
| H-2-118100 | 01 | GA FAN HOUSE FIRST FLOOR PLAN | 0 |
| H-2-118101 | 01 | GA FAN HOUSE SECOND FLOOR PLAN | 0 |
| H-2-118102 | 01 | GA FAN HOUSE ROOF PLAN | 0 |
| H-2-118103 | 01 | GA FAN HOUSE SOUTH ELEVATION & SECTION | 0 |
| H-2-118104 | 01 | GA FAN HOUSE EAST & WEST ELEVATION | 0 |
| H-2-118105 | 01 | GA FAN HOUSE HEPA FILTER BY-PASS PLANS | 0 |
| H-2-118106 | 01 | GA FAN HOUSE HEPA FILTER BY-PASS SECTIONS | 0 |

GA INDEX

| DRAWING NUMBER | SHT NUMBER | DRAWING TITLE | REV |
|---|---|---|---|
| H-2-118109 | 01 | GA SAND FILTER BUILDING TUNNEL PLAN | 0 |
| H-2-118110 | 01 | GA SAND FILTER BUILDING FLOOR PLAN-WEST END | 0 |
| H-2-118112 | 01 | GA SAND FILTER BUILDING ROOF PLAN-WEST END | 0 |
| H-2-118111 | 01 | GA SAND FILTER BUILDING FLOOR PLAN-EAST END | 0 |
| H-2-118113 | 01 | GA SAND FILTER BUILDING ROOF PLAN-EAST END | 0 |
| H-2-118114 | 01 | GA SAND FILTER BUILDING SECTIONS | 0 |
| H-2-118115 | 01 | GA SAND FILTER BUILDING SECTIONS | 0 |
| H-2-118117 | 01 | GA INTERCONNECTING EXHAUST TUNNEL PLAN AND SECTIONS | 0 |
| H-2-118120 | 01 | GA FRIT STORAGE/COLD CHEM BUILDING FLOOR PLAN | 0 |
| H-2-118121 | 01 | GA FRIT STORAGE/COLD CHEM BUILDING MISCELLANEOUS FLOOR PLANS | 0 |
| H-2-118124 | 01 | GA FRIT STORAGE/COLD CHEM BUILDING SECTIONS | 0 |
| H-2-118140 | 01 | GA OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING FIRST FLOOR PLAN | 0 |
| H-2-118141 | 01 | GA OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING MECH PENTHOUSE FLOOR PLAN/ROOF PLAN | 0 |
| H-2-118142 | 01 | GA OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING EXTERIOR ELEVATIONS | 0 |
| H-2-118143 | 01 | GA OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING PENTHOUSE ROOF PLAN/BLDG SECTION | 0 |
| H-2-118160 | 01 | GA MECH/ELEC SERVICES BUILDING FLOOR PLAN | 0 |
| H-2-118162 | 01 | GA MECH/ELEC SERVICES BUILDING SECTIONS A & B | 0 |
| H-2-118170 | 01 | GA SWITCHGEAR BUILDING FIRST FLOOR PLAN | 0 |
| H-2-118171 | 01 | GA SWITCHGEAR BUILDING BASEMENT & SECOND FLOOR PLAN | 0 |
| H-2-118172 | 01 | GA SWITCHGEAR BUILDING SECTIONS AND DETAILS | 0 |
| H-2-118173 | 01 | GA SWITCHGEAR BUILDING ELEVATIONS | 0 |
| H-2-118174 | 01 | GA SWITCHGEAR BUILDING ROOF PLAN | 0 |
| H-2-118180 | 01 | GA WHT BUILDING FLOOR PLAN | 0 |
| H-2-118181 | 01 | GA WHT BUILDING SECTION A | 0 |
| H-2-118182 | 01 | GA WHT BUILDING SECTION B | 0 |
| H-2-118190 | 01 | GA SOLAR EVAPORATION TANK PLAN | 0 |
| H-2-118191 | 01 | GA SOLAR EVAPORATION TANK SECTIONS & DETAILS | 0 |

PROJECT TITLE:

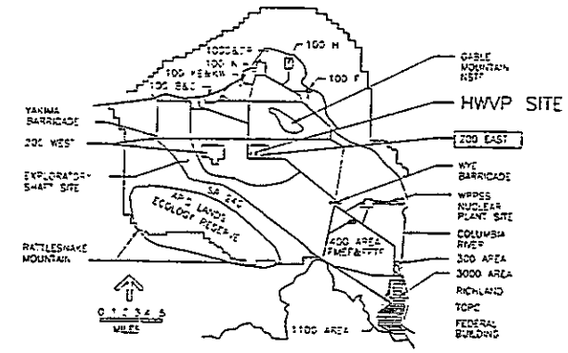
# B-595 HWVP-HANFORD WASTE VITRIFICATION PLANT

FOR:

## U.S. DEPARTMENT OF ENERGY
## RICHLAND OPERATIONS OFFICE

BY: FLUOR DANIEL, INC

## PRELIMINARY DESIGN
## FINAL SITE PLANS




HANFORD AREA MAP

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| 0 | 10/19/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0049 | |
| DO | 9/5/90 | RELEASED FOR DETAIL DESIGN | BY / CK / EJ / CDS / FGB / DPC / RNG |

REVISION DESCRIPTION | APPROVAL DATE

ENGINEERING RELEASE
REV ____ DATE ____
CHG

| | |
|---|---|
| R N GIBBONS | 10-05-90 |
| D P CHAWLA | 10-05-90 |
| F G BROOKS | 10-05-90 |
| J L SMETS | 10-31-90 |
| E R JACOBS | 10-31-90 |
| G KULANOFF | 10-31-90 |
| J R SOTO | 10-31-90 |
| M O'KEEFE | 10-31-90 |
| E H CONLEY | 10-31-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
OF = ADVANCED TECH.

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE PLANS
TITLE SHEET

PROJECT TITLE: HANFORD WASTE VITRIFICATION PLANT

PROJECT: B-595 | PROJ. NO. 845724 | DWG. NO. 3101

SIZE: NONE | SCALE: NONE | SHEET 1 OF 1 | REV. 0

NONE | NOT REQ'D | H-2-117100

AAC117100

| DOCUMENT NO. | REVISION | TITLE |
|---|---|---|
| CIVIL | | |
| H-2-117100 | 0 | FINAL SITE PLAN TITLE SHEET |
| H-2-117101 | 0 | FINAL SITE PLAN DRAWING INDEX |
| H-2-117102 | 0 | FINAL SITE PLAN LEGEND, ABBREVIATIONS INDEX AND GENERAL NOTES |
| H-2-117103 | 0 | OVERALL FINAL SITE FINISH PAVING PLAN |
| H-2-117104 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117105 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117106 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117107 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117108 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117109 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117110 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117111 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117112 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117113 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117114 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117115 | 0 | FINAL SITE GRADING AND UTILITIES PLAN |
| H-2-117120 | 0 | FINAL SITE PLANS SECTIONS AND DETAILS |
| H-2-117121 | 0 | FINAL SITE PLANS SECTIONS AND DETAILS |

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | | |
|---|---|---|---|---|---|
| 0 | 10/1/90 | RELEASED FOR PROJECT BASELINE CONTROL, PER CR HWVP-0449 | BC | DK | DK | RJ |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | DK | DK | CJ |
| | | | CDG | FCS | OPC | RMC |

ENGINEERING RELEASE
REV ____ DATE ____
ERD ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - RICHLAND DIVISION

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE PLAN
DRAWING INDEX

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R N GIBBONS | 10-31-90 |
| D P CHAWLA | 10-31-90 |
| F G BROOKS | 10-31-90 |
| J L SMETS | 10-31-90 |
| E R JACOBS | 10-31-90 |
| J NUILANOFF | 10-31-90 |
| J P SOTO | 10-31-90 |
| H O'KEEFE | 10-31-90 |
| S H COLLEY | 10-31-90 |

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3101 | |
| NONE | | | |
| NONE | NOT REQ'D | H-2-117101 | 1 / 1 / 0 |

AAC17101

9112107.0969

## ABBREVIATION INDEX

| | |
|---|---|
| ALT | ALTERNATE |
| AVE | AVENUE |
| BC | BEGIN CURVE |
| BLDG | BUILDING |
| BOD | BOTTOM OF DITCH |
| CB | CATCH BASIN |
| C/L | CENTER LINE |
| CMP | CORRUGATED METAL PIPE |
| CMR | CONTACT MAINTENANCE ROOM |
| COLD CHEM | COLD CHEMICAL BUILDING |
| DCS | DISTRIBUTOR CONTROL SYSTEM |
| DWG | DRAWING |
| EC | END CURVE |
| EXIST | EXISTING |
| FAB SHOP | FABRICATION SHOP |
| FF EL | FINISH FLOOR ELEVATION |
| FL | FLOW LINE |
| FRIT ST | FRIT STORAGE |
| GB | GRADE BREAK |
| GFE | GOVERNMENT FURNISHED EQUIPMENT |
| HP | HIGH POINT |
| HPS | HANFORD PLANT STANDARDS |
| IE | INVERT ELEVATION |
| INSTR | INSTRUMENT/INSTRUMENTATION |
| KV | KILOVOLTS |
| LP | LOW POINT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| MRB | MANIPULATOR REPAIR BUILDING |
| OAB | OPERATION ANNEX BUILDING |
| OC/RES | OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING |
| PI | POINT OF INTERSECTION |
| PSI | POUNDS PER SQUARE INCH |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| RET | RETAINING |
| RLST | RECEIPT AND LAG STORAGE TANK |
| RR | RAILROAD |
| S=0.0 | SLOPE |
| ST | STREET |
| TOR | TOP OF RAIL |
| TYP | TYPICAL |
| VIT BLDG | VITRIFICATION BUILDING |
| W/ | WITH |
| WHT | WASTE HOLD TANK VAULT AND BUILDING |
| WWF | WELDED WIRE FABRIC |
| & | AND |
| @ | AT |

## LEGEND

| | |
|---|---|
| | CRUSHED ROCK PAVING |
| | ASPHALTIC CONCRETE PAVING |
| | CONCRETE PAVING |
| | LIGHT ASPHALTIC SURFACE |
| | CRUSHED ROCK ROAD SHOULDER |
| | EXISTING FENCE |
| | SECURITY FENCE |
| | RAILROAD |
| | EXISTING RAILROAD |
| SSMH | SANITARY SEWER MANHOLE |
| SSCO | SANITARY SEWER CLEANOUT |
| | FIRE HYDRANT |
| CDX | CHEMICAL DRAIN |
| DRN | DRAIN |
| FWV | FIRE WATER |
| HPS | HIGH PRESSURE STEAM |
| IAV | INSTRUMENT AIR |
| LPW | PROCESS WATER |
| PAV | PLANT AIR |
| PRO | PROCESS |
| RWO | RAW WATER |
| SS | SANITARY SEWER |
| SWV | SANITARY WATER |
| TPW | TOWER WATER RETURN |
| TSW | TOWER WATER SUPPLY |
| | VALVE |
| C | CATCH BASIN |
| | UNIFORM SLOPE |
| | EXISTING UNDERGROUND LINE |
| 710 | EXISTING CONTOUR |
| 710 | FINISH CONTOUR |
| | DIRECTION OF DRAINAGE FLOW |
| (710.0) | EXISTING ELEVATION |
| 710.0 | FINISH ELEVATION |
| | ELECTRICAL U/G DUCT BACK |
| | ELECTRICAL MANHOLE |
| C | COMMUNICATION LINE |
| O | ELECTRICAL POLE LINE |
| | ELECTRICAL POLE |
| | LIGHT |
| | GATE |

## GENERAL NOTES:

1. ALL ELECTRICAL UNDERGROUND CABLES SHALL HAVE A MINIMUM OF 2" DIA. PVC CONDUIT, INSTALLED IN CONCRETE DUCT BANKS WITH AT LEAST 3" OF CONCRETE ON ALL SIDES
2. ELECTRICAL GROUND WIRES SHALL BE INCLUDED IN EACH DUCT BANK
3. MINIMUM COVER REQUIREMENTS FOR ALL UNDERGROUND ELECTRICAL DUCTS SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC)
4. ALL ELECTRICAL UNDERGROUND DUCTS SHALL BE SLOPED TOWARDS A MANHOLE. MINIMUM SLOPE SHALL BE 3" PER 100' OF DUCT.
5. THE MAXIMUM GRADE ON THE RAILROAD SPUR IS 0.01 THE FROGS WILL BE NUMBER 8
6. ALL ROADS WILL HAVE A MINIMUM EDGE OF PAVEMENT RADIUS OF 30'.
7. THE SANITARY SEWER SYSTEM WILL HAVE A MINIMUM SLOPE OF 0.005 AND THE MAXIMUM SPACING BETWEEN MANHOLES WILL BE 350' SEWER LINES WILL HAVE A MINIMUM OF 3' OF COVER

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV NO | DATE | REVISION DESCRIPTION | APPROVING INITIALS |
|---|---|---|---|
| D | 10/26/90 | REVISED NOTE 3 AND RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | EC / VS / GAW / [illegible] |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | SC / [illegible] / GK / EJ / CDG / FCB / DPC / PHC |

ENGINEERING RELEASE
REV _____ DATE _____
CPD _____

| SIGNATURE | DATE |
|---|---|
| R.N. GIBBONS | 05-05-90 |
| D.P. CHAWLA | 05-05-90 |
| T.G. BROOKS | 05-05-90 |
| J.L. SMETS | 05-31-90 |
| T.R. JACOBS | 05-31-90 |
| C. KUILANOFF | 05-31-90 |
| J.P. SOTO | 05-31-90 |
| H.O. KEEFE | 05-31-90 |
| B.H. CONLEY | 05-31-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE PLANS
LEGEND ABBREVIATIONS INDEX
AND GENERAL NOTES

HANFORD WASTE VITRIFICATION PLANT

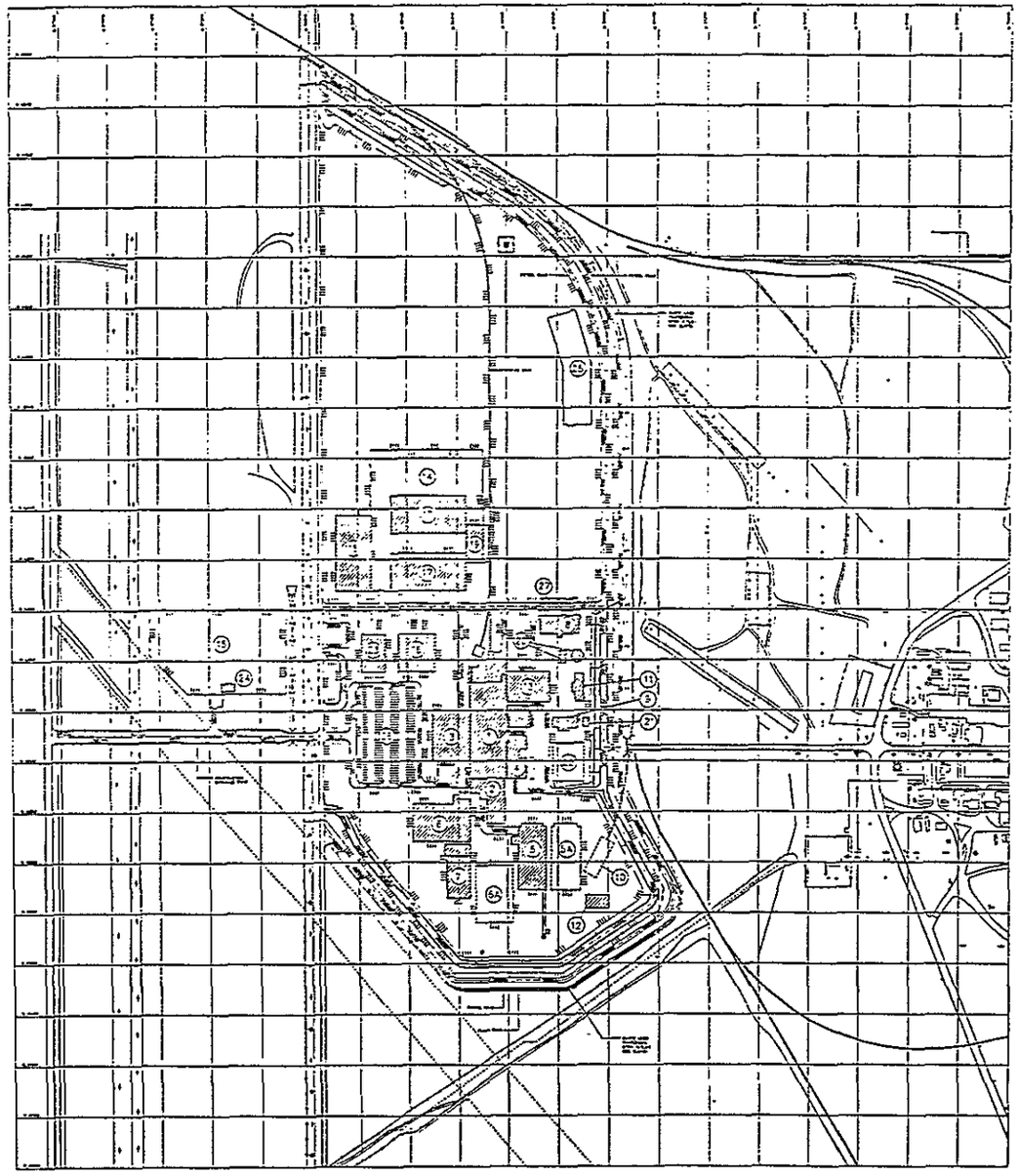
| PROJECT | PROJECT DRAWING NO. | SHEET NO. |
|---|---|---|
| B-595 | 845724 | 3101 |

| DWG. NO. | SHEET | REV |
|---|---|---|
| NONE | NOT REQ'D | H-2-117102 | 1 | 1 | 0 |

AP017102

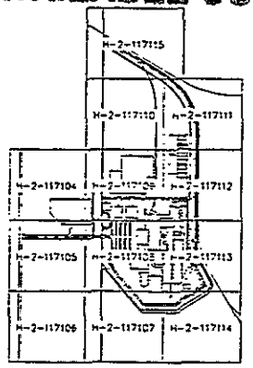
0 0 6 0 7 7 1 2 1 1 6

BEST AVAILABLE COPY



1. VITRIFICATION BUILDING
2. MANIPULATOR REPAIR BUILDING
3. OPERATIONS CONTROL/REGULATED ENTRANCE BUILDING
4. FRIT STORAGE/COLD CHEM BUILDING
5. CANISTER STORAGE BUILDING
5A. CANISTER STORAGE BUILDING (FUTURE)
6. SAND FILTER BUILDING
6A. SAND FILTER BUILDING (FUTURE)
7. FAN HOUSE
8. SWITCHGEAR/GENERATOR BUILDING
9. WASTE HOLD TANK VAULT AND BUILDING
10. CANISTER LOAD OUT BUILDING (FUTURE)
11. COOLING TOWER
12. SOLAR EVAPORATION TANK
13. MECH/ELECT SERVICES BUILDING
14. GOVERNMENT FURNISHED EQUIPMENT STORAGE YARD
15. SWITCHYARD
16. OPERATIONS ANNEX BUILDING
17. GOVERNMENT FURNISHED EQUIPMENT WAREHOUSE
18. FABRICATION SHOP
19. RECEIVING AND STORAGE BUILDING
20. FIRE WATER TANK AND PUMP HOUSE
21. RAW WATER PUMP HOUSE
22. RECEPT LAG STORAGE TANK (FUTURE)
23. TEMPORARY CONSTRUCTION OFFICE BUILDING
24. RELAY BUILDING
25. LEACH FIELD
26. PARKING
27. DIESEL FUEL TANKS & PUMPS (UNDERGROUND)

0' 100' 200' 400' 600'
GRAPHIC SCALE




KEY PLAN

RELEASED FOR PROJECT BASELINE CONTROL

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

LEGEND

ASPHALTIC CONCRETE PAVING

CRUSHED ROCK SURFACE

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | APPROVAL DETAILS |
|---|---|---|---|
| 0 | 11/21/90 | REVISED TO INCLUDE UGF FUEL TANKS, WOOD COOL TOWER, EVAPORATION POND, LEACH FIELD, ACCESS TO SW & EXTENDED PAVE TO NRS AND RELEASED FOR PROJECT BASELINE CONTROL (SEE LIST OF REVISIONS) | BC DWS 11/21 EJ; KT BBC 11/21 |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC 9/5 CK EJ; CDG FDB OPC RNG |

ENGINEERING RELEASE
REV. ____ DATE ____
ERD

| | | |
|---|---|---|
| DRAWN BY R.N.GIBBONS | 10-5-90 | |
| DESIGN APPROVAL O.P.CHAWLA | 10-5-90 | |
| PROJECT ENGINEER F.G.BROOKS | 10-5-90 | |
| SYSTEM ENG. J.L.SMETS | 10-5-90 | |
| DISCIPLINE ENGINEER E.R.JACOBS | 10-5-90 | |
| DISCIPLINE ENGINEER G.KULANOFF | 10-5-90 | |
| PROJECT ENGINEER J.R.SOTO | 10-5-90 | |
| PROJECT MANAGER H.O'KEEFE | 10-5-90 | |
| PROJECT DIRECTOR B.H.CONLEY | 10-5-90 | |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RL - ACON-MANAGER

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

OVERALL FINAL SITE
FINISH PAVING PLAN

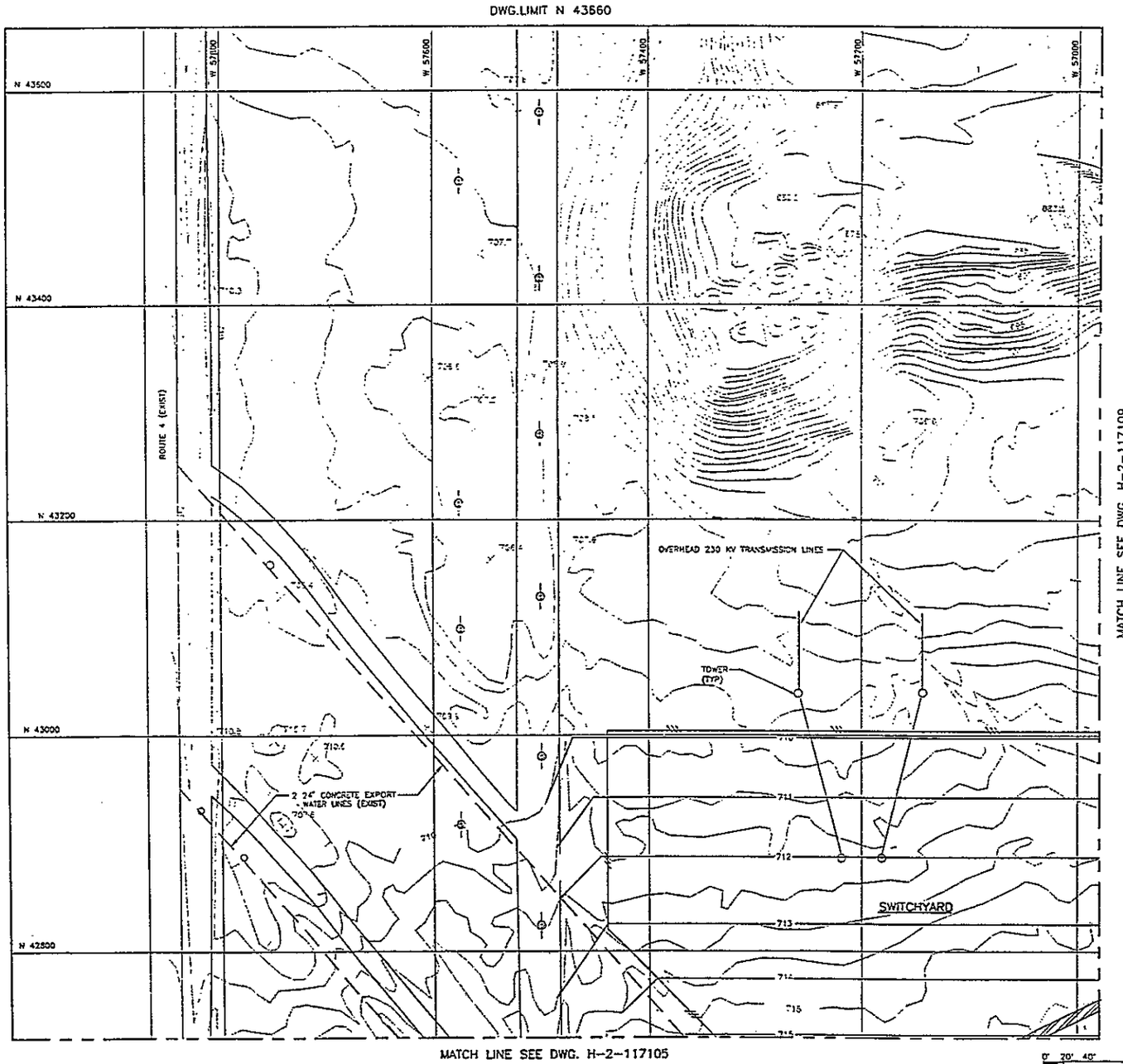
HANFORD WASTE VITRIFICATION PLANT

PROJECT NO. B-595 | PLANT SECTION OR CODE 645724 | DRAWING NO. 3101
SCALE 1"=200'

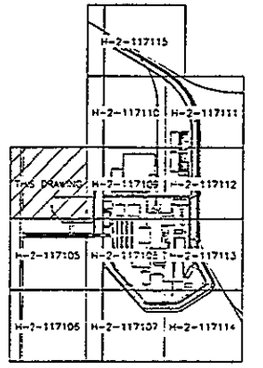
| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117103 | 1 | 1 | 0 |

AAC17103

9112117103 1




0' 20' 40' 80' 120'
GRAPHIC SCALE




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| 0 | 11/1/90 | RELEASED FOR PROJECT BASELINE CONTROL PER ER-WWP-0449 | BC 10/31/90 DK 10/26/90 RJ |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC 9/5/90 CDG FDB DK DPC RJ RNG |

ENGINEERING RELEASE
REV. ____ DATE ____
EWO

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R.N GIBBONS | 10-31-90 |
| D.P.CHAWLA | 10-31-90 |
| F.C.BROOKS | 10-31-90 |
| J.L.SVETS | 10-31-90 |
| E.R.JACOBS | 10-31-90 |
| C KUKLANOFF | 10-31-90 |
| J.R.SOTO | 10-31-90 |
| H O'KEEFE | 10-31-90 |
| D H.CONLEY | 10-31-90 |

Project No. 8-595
Drawing No. 545724
Sheet No. 3101
Scale 1" = 40'
Superseded NONE
Superseded by NOT REQ'D
H-2-117104 | 1 | 1 | 0

AAC17104

9111217092

9 1 1 2 1 0 7 0 2 . 3

MATCH LINE SEE DWG. H-2-117104

RELAY BLDG

3' PERSONNEL GATE
20' DOUBLE SWING GATE

24" CONCRETE EXPORT WATER LINES (EXIST)

CONSTRUCTION ENTRANCE ROAD

HOUR 4 (EXIST)

DWG. LIMIT W 58000

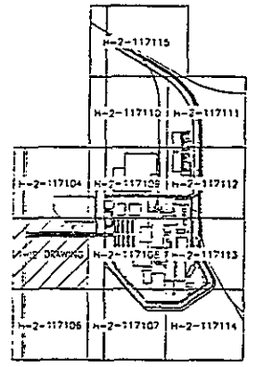
N 42600
N 42400
N 42200
N 42000
N 41800

W 57800
W 57600
W 57400
W 57200
W 57000

MATCH LINE SEE DWG. H-2-117108

MATCH LINE SEE DWG. H-2-117106

GRAPHIC SCALE 0' 20' 40' 80' 120'




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY | CK | EJ |
|---|---|---|---|---|---|
| D | 10/26/90 | ADDED PERSONNEL GATE AND RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | | | |
| CD | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | | CK EJ |

ENGINEERING RELEASE
REV ____ DATE ____
END ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10836

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

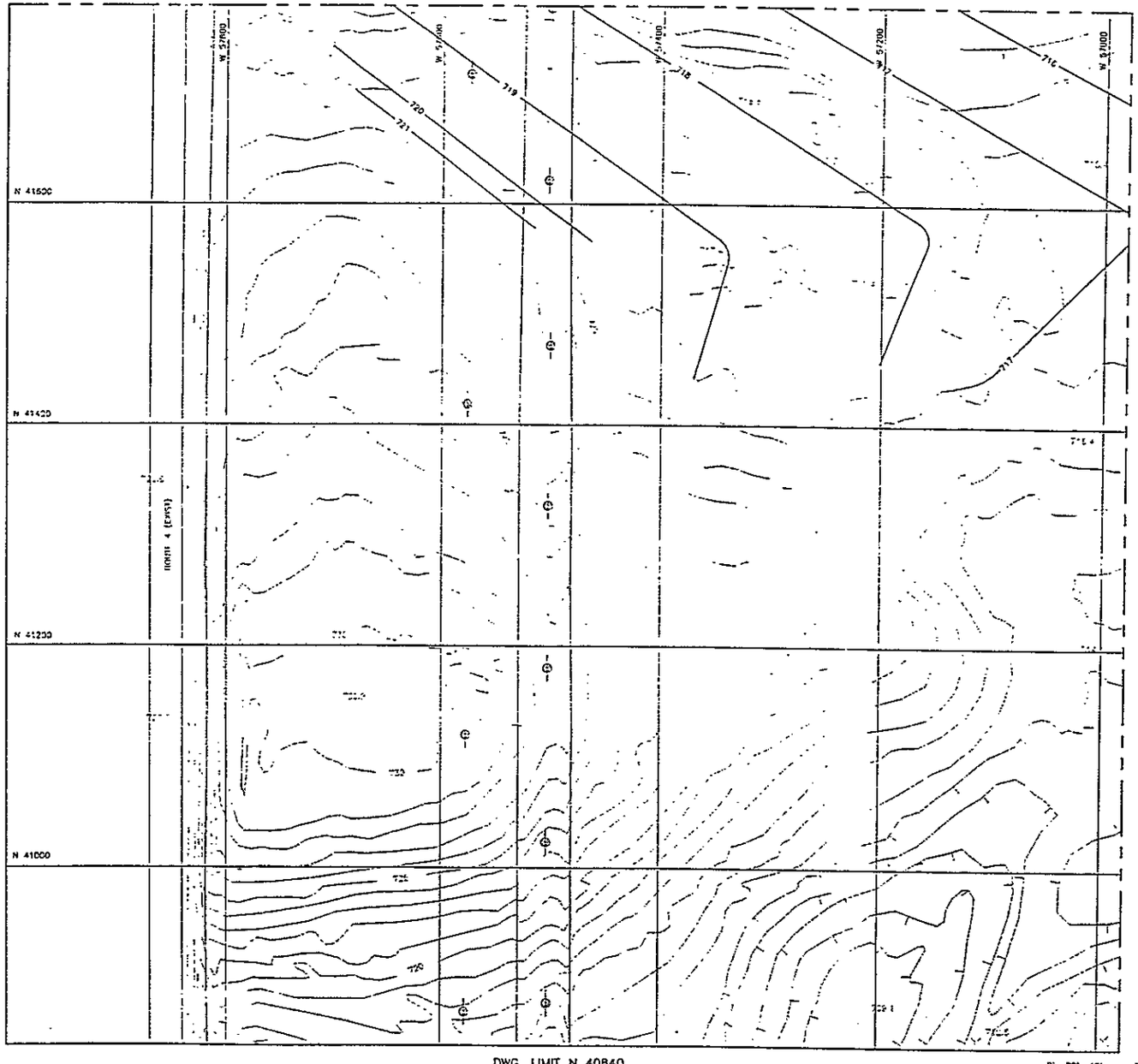
FINAL SITE
GRADING AND UTILITIES PLAN

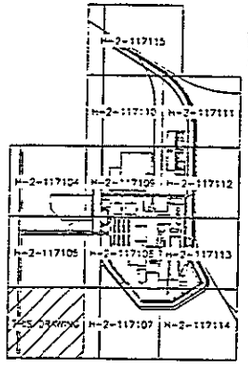
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| R.A. DIBBONS | 12-3-2 | |
| S.P. CHAMLA | 12-5-2 | |
| J.J. BROOKS | 12-5-2 | |
| J.J. SMETS | 12-3-2 | |
| T.R. JACOBS | 12-3-2 | |
| I.G. KURANOFF | 12-3-2 | |
| J.R. SOTO | 12-3-2 | |
| H.O. O'KEEFE | 12-3-2 | |
| B.H. CONLEY | 12-3-2 | |

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3101 | |
| 1" = 40' | | | |
| NONE | NOT REQ'D | H-2-117105 | 1 1 0 |

AAC17105




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWING INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

GRAPHIC SCALE

| REV | DATE | REVISION DESCRIPTION | DR | CK | EJ |
|---|---|---|---|---|---|
| D | 7/19/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HNVP-0449 | BC | | |
| CD | 8/31/90 | RELEASED FOR DETAIL DESIGN | BC | DK | EJ |

CDG | FDB | OPC | RHO

ENGINEERING RELEASE
REV ____ DATE ____
CKG. ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-90RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| DRAWN BY | R. V. GIBBONS |
| DESIGNED BY | O. P. CHAWLA |
| ENGINEERED BY | F. J. BROOKS |
| CHECKED BY | J. J. SMETS |
| APPROVED BY | E. R. JACOBS |
| | G. KUSANOFF |
| | J. R. SOTO |
| | H. O'KEEFE |
| | B. H. CONLEY |

B-595 | 843724 | 3101

1" = 40'

NONE | NOT FOR CONSTRUCTION | H-2-117106 | 1 | 1 | 0

AMC17106

9112170204

MATCH LINE SEE DWG. H-2-117108

MATCH LINE SEE DWG. H-2-117106

MATCH LINE SEE DWG. H-2-117114

DWG. LIMIT N 40840

COMMUNICATIONS DUCT

4:1 SLOPE

2-24" CONCRETE EXPORT WATER LINES (EXIST)

SNX & RWX MANIFOLD SHELTER

SNX

RWX

SECURITY FENCE

PLANT ROAD

20' CLEAR ZONE

PATROL ROAD

UNLINED "V" DITCH W/3:1 SIDE SLOPES

711.5

710.5

707.5

SNX

RWX

BEGIN CONCRETE LINED TRAPEZOIDAL DITCH W/2.5:1 SIDE SLOPES

N41600

N41400

N41200

N41000

SECURITY FENCE (EXIST)

AKRON AVE (EXIST)

CABLE TV POLE

COMMUNICATIONS DUCT TO AKRON & FOURTH ST INTERFACE POINT

TYPE 6-69 ENDASEMENT EAST/WEST TRANSFER LINE (EXIST)

W56600

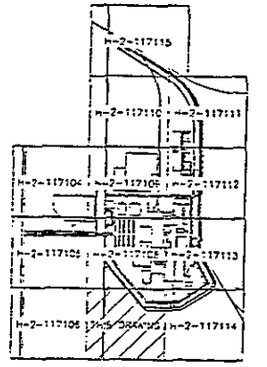
W56400

W56200

W56000

0' 20' 40' 80' 120'

GRAPHIC SCALE




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | |
| CC | 9/25/90 | RELEASED FOR DETAIL DESIGN | BC / CK / EJ; CDC / FCB / DPC / RHC |

ENGINEERING RELEASE
REV. ____ DATE ____
CRC ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

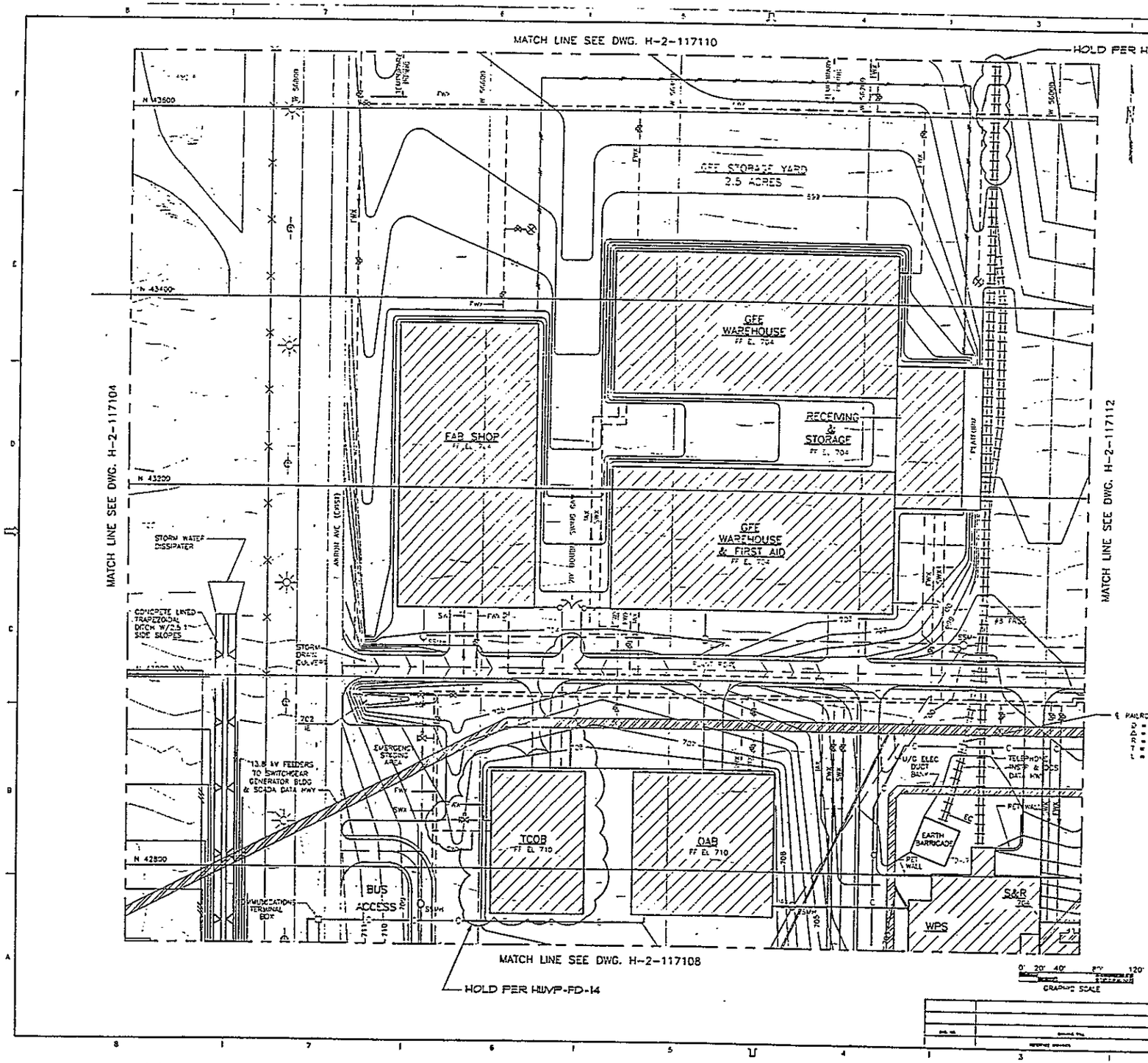
| | | |
|---|---|---|
| R.K. DIBBONS | 10-25-90 | |
| O.P. CHAWLA | 10-25-90 | |
| F.J. BROOKS | 10-25-90 | |
| J.L. SVETS | 10-25-90 | |
| E.R. JACOBS | 10-25-90 | |
| G. KURANOFF | 10-25-90 | |
| J.R. SOTO | 10-25-90 | |
| H.D. KEEFE | 10-25-90 | |
| B.M. CONLEY | 10-25-90 | 1"=40' |

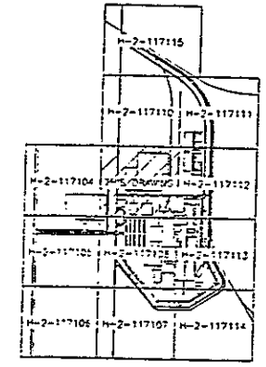
B-595 | 845724 | 3101

NONE | NOT REQ'D | H-2-117107 | 1 | 0

A4217107

5 2 0 0 7 1 1 7 1 1 6




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | DR | CK | EJ |
|---|---|---|---|---|---|
| 0 | 8/14/90 | RELOCATED ELECTRICAL U/G DUCT BANK & MOVED CONST. WASTES ROUTING ACROSS HWY. SWY & FWY TO OFF WASTE AND REMOVED HOLDS AT FWY LINES AND OFF WASTE PER CR HWVP-0449 RELEASED FOR PROJECT BASELINE CONTROL | BC | JS | RJ |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | CK | EJ |

CDC | FCB | DPC | RNG

ENGINEERING RELEASE
REV. ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10929

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | |
|---|---|
| DRAWN BY | R N GIBBONS |
| DESIGN BY | D P CHAWLA |
| CHECKED BY | F.G. BROOKS |
| PROJ. ENGR | J L SUETS |
| PROJ. MGR | E R JACOBS |
| CONSTRUCTION | G KUSANOFF |
| PROJECT ENGR | J R SOTO |
| PROJECT MGR | H O'KEEFE |
| CONSTRUCTION | B H CONLEY |

FINAL SITE
GRADING AND UTILITIES PLAN

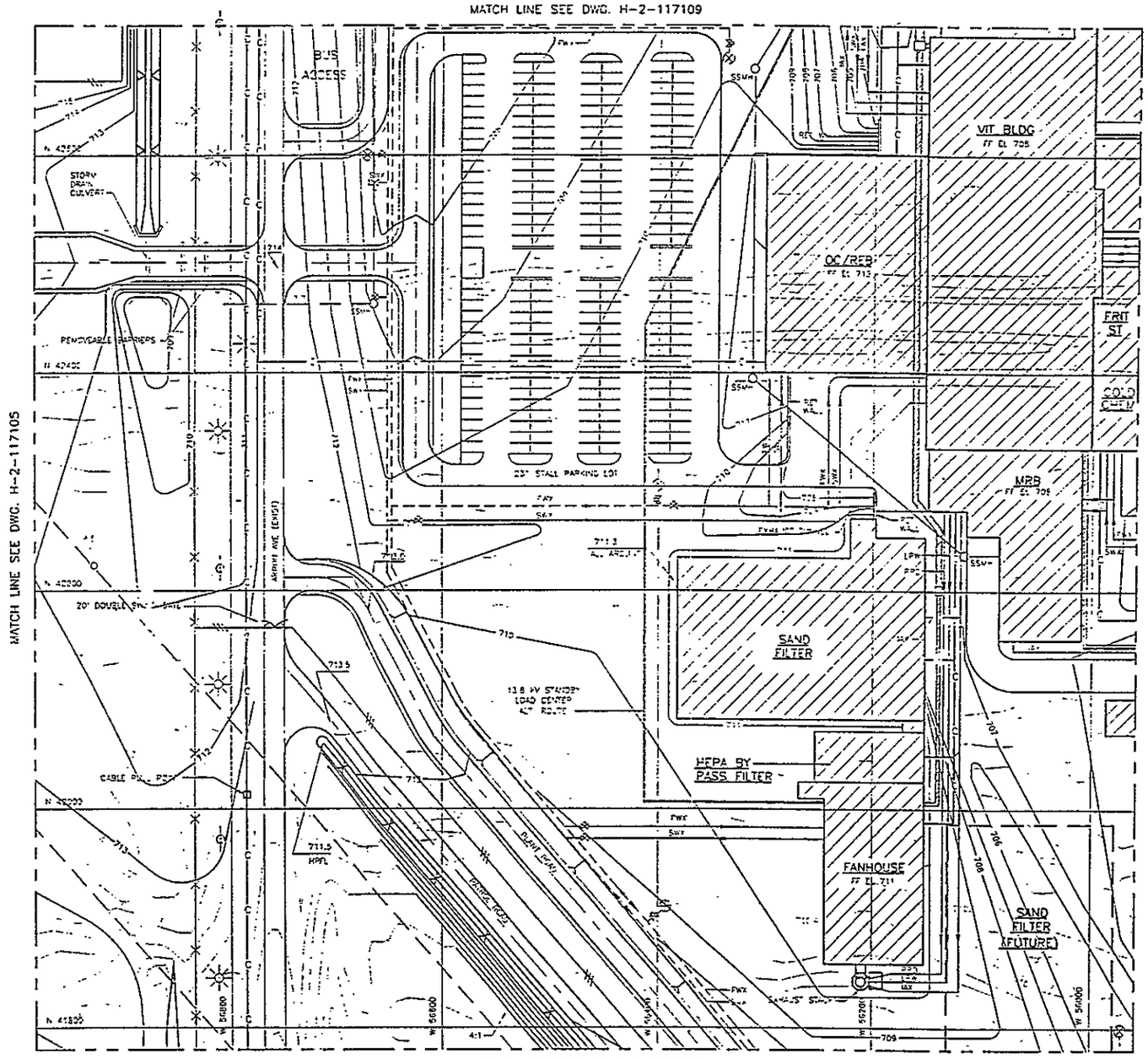
HANFORD WASTE VITRIFICATION PLANT

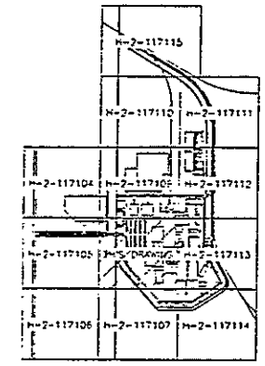
| | |
|---|---|
| PROJECT NUMBER | 845724 |
| DWG. NO. | 3101 |
| SCALE | 1" = 40' |
| SHEET NO. | 1 |
| REV. | 0 |

NONE | NOT REQ'D | H-2-117109

AAC17106

9112170936




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV NO | DATE | DESCRIPTION | BY | CHK | EJ |
|---|---|---|---|---|---|
| 0 | 10/26/90 | EXPANDED MFE, ADDED RETAINING WALL, EXTENDED PARKING TO MRB AND REVISED FWX & SWX TO OC/REB PER CP HWP-0449 AND RELEASED FOR PROJECT BASELINE CONTROL | | | |
| 00 | 9/15/90 | RELEASED FOR DETAIL DESIGN | BC | CK | EJ |

CCG | FCB | OPC | RWG

ENGINEERING RELEASE
REV. ____ DATE ____
EPD

| | |
|---|---|
| R N GIBBONS | 10-25-90 |
| D P CHAWLA | 10-25-90 |
| F C BROOKS | 10-25-90 |
| J L SMETS | 10-31-90 |
| E K JACOBS | 10-30-90 |
| G KURLANOFF | 10-30-90 |
| J.P. SOTO | 10-30-90 |
| H O'KEEFE | 10-30-90 |
| E.H. CONLEY | 10-30-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

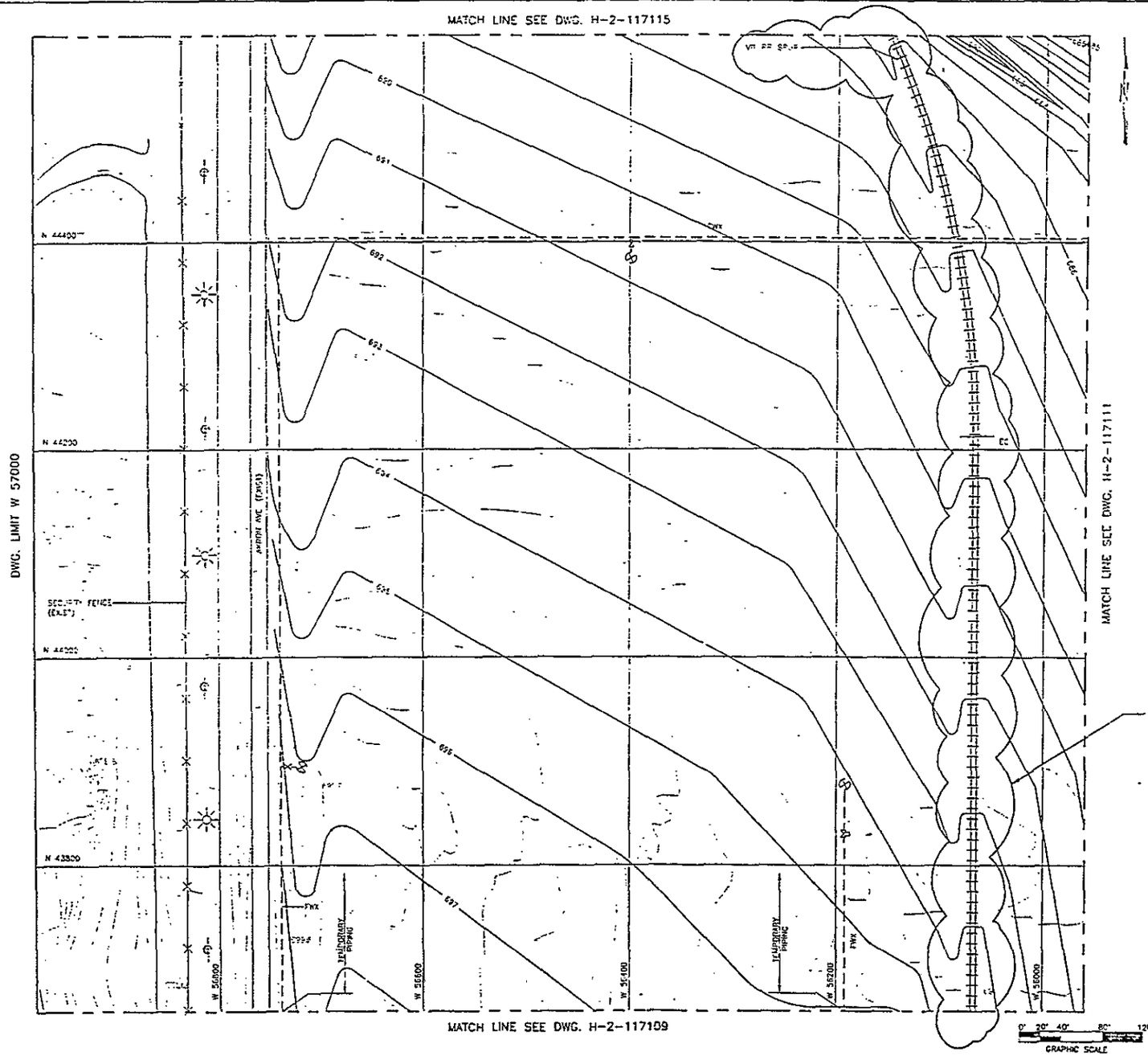
FINAL SITE
GRADING AND UTILITIES PLAN

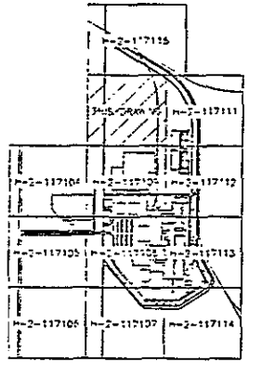
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 9-555 | 845724 | 3101 | |
| 1" = 40' | | | |
| NONE | NOT REQ'D | H-2-117108 | 1 1 0 |

GRAPHIC SCALE
0' 20' 40' 80' 120'

9112170917




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| D | RELEASED DUE TO LEACH FIELD RELOCATION AND REMOVED HOLES AT EW3 PLUMES AND NORTH END PER DP HWVP-PD-16 RELEASED FOR PROJECT BASELINE CONTROL | | |
| CC | RELEASED FOR DETAIL DESIGN | | |

ENGINEERING RELEASE
REV ____ DATE ____
EWO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - RL

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

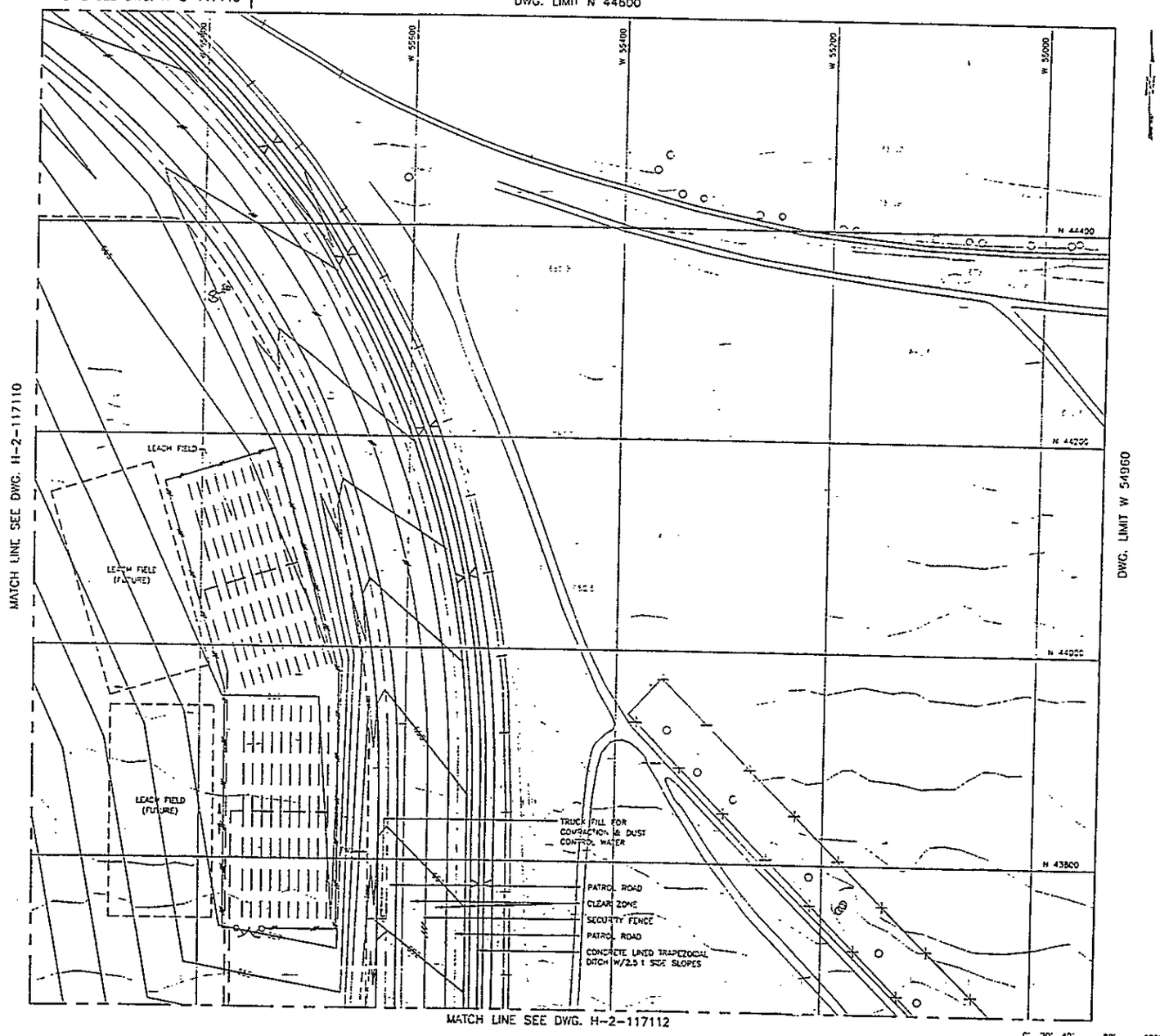
FINAL SITE
GRADING AND UTILITIES PLAN

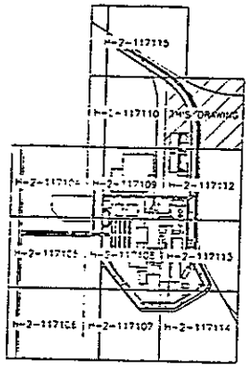
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| J P SOTO | 10-26-90 | |
| H D KEEFE | 10-26-90 | |
| E.H. CONLEY | 10-26-90 | |

| | | |
|---|---|---|
| 8-595 | 845724 | 3101 |
| 1" = 40' | | |
| NONE | NOT REQ'D | H-2-117110 | 1 | 0 |

AAC17110




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | |
|---|---|---|
| 0 | REGRADED AND RELOCATED LEACH FIELDS AND MOVED PWV BETWEEN LEACH FIELDS AND REMOVED HOLDS RELEASED FOR PROJECT BASELINE CONTROL PER CR WWP-0413 | BC |
| | RELEASED FOR DETAIL DESIGN | BC |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-76RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

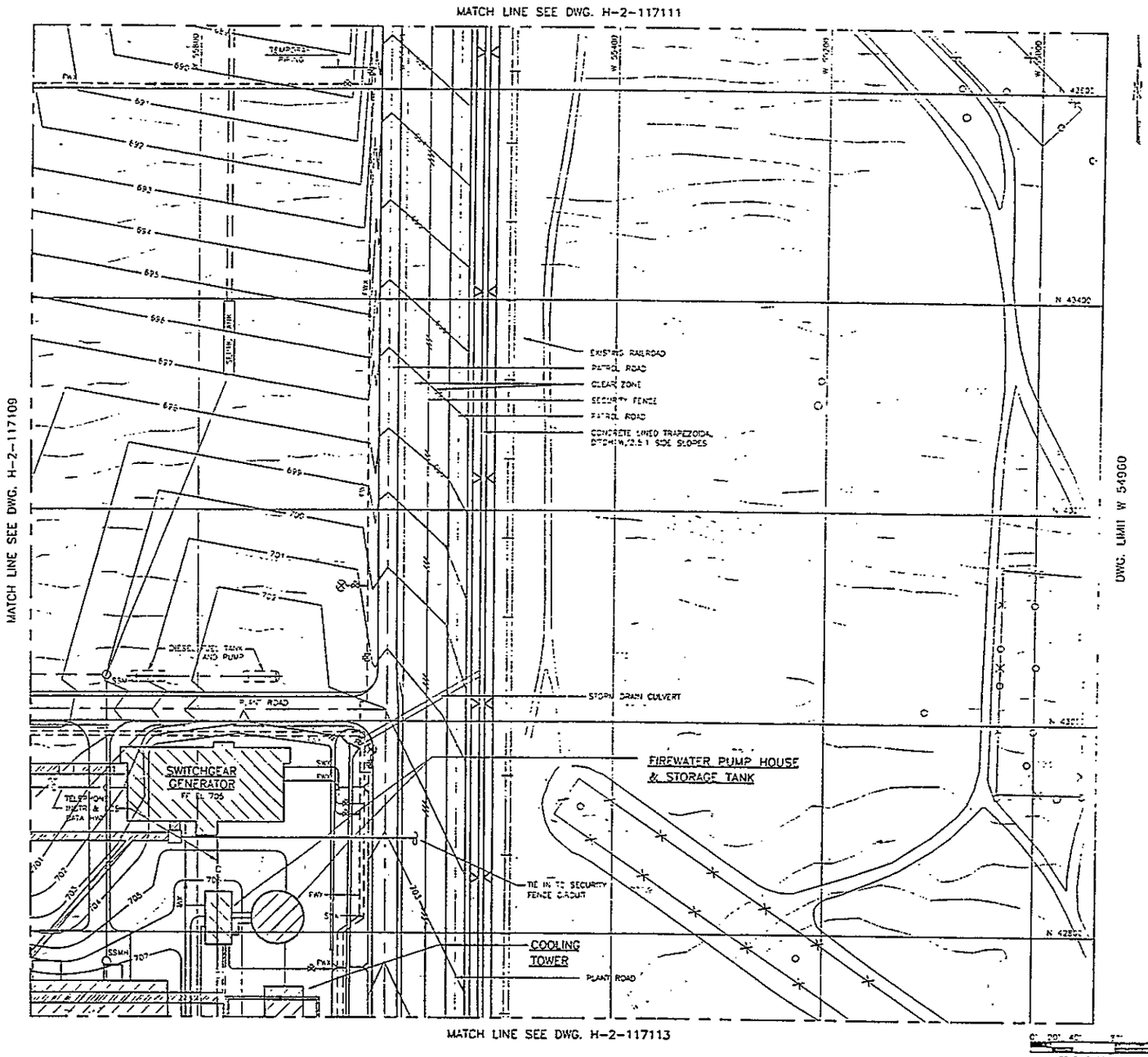
FINAL SITE
GRADING AND UTILITIES PLAN

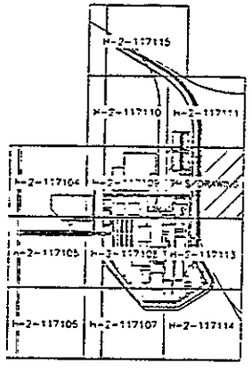
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| F. C. GIBBONS | 10-26-90 | |
| D. P. CHAWLA | 10-26-90 | |
| F. J. BROOKS | 10-26-90 | |
| J. L. SMETS | 10-26-90 | |
| E. F. JACOBS | 10-26-90 | |
| G. R. LAYOFF | 10-26-90 | |
| J. R. SOTO | 10-26-90 | |
| J. H. SEEFE | 10-26-90 | |
| E. F. CONLEY | 10-26-90 | |

| | | | |
|---|---|---|---|
| 8-595 | 84572- | 3101 | |
| 1" = 40' | | | |
| NONE | NOT REQ'D | H-2-117111 | 1 1 0 |

9112170209




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | | | | |
|---|---|---|---|---|---|---|
| 0 | 10/26/90 | REVD COOLING TOWER, ADDED DIESEL TANKS & PUMPS, RELOCATED BLDGS. & FWS LINE, ADD REMOVED HOLDS PER CR HWVP-0449 AND RELEASED FOR PROJECT BASELINE CONTROL | PEC | DJS | 4/6/87 | |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | DJS | CK | EJ |
| | | | CCG | FCB | OPC | PHC |

ENGINEERING RELEASE
REV ____ DATE ____

| | | |
|---|---|---|
| DRAWN BY | R.A. GIBBONS | 10-25-90 |
| ENGINEER | O.P. CHAWLA | 10-25-90 |
| PROJECT ENGINEER | P.C. BROOKS | 10-25-90 |
| DESIGN | J.L. SMETS | 10-25-90 |
| PROJECT | C.R. JACOBS | 10-25-90 |
| CHECKED | C. KUILANOFF | 10-25-90 |
| APPROVED | J.R. SOTO | 10-25-90 |
| APPROVED | H.O'KEEFE | 10-25-90 |
| APPROVED | S.H. CONLEY | 10-25-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
P.O. Box 550, Richland, WA 99352

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

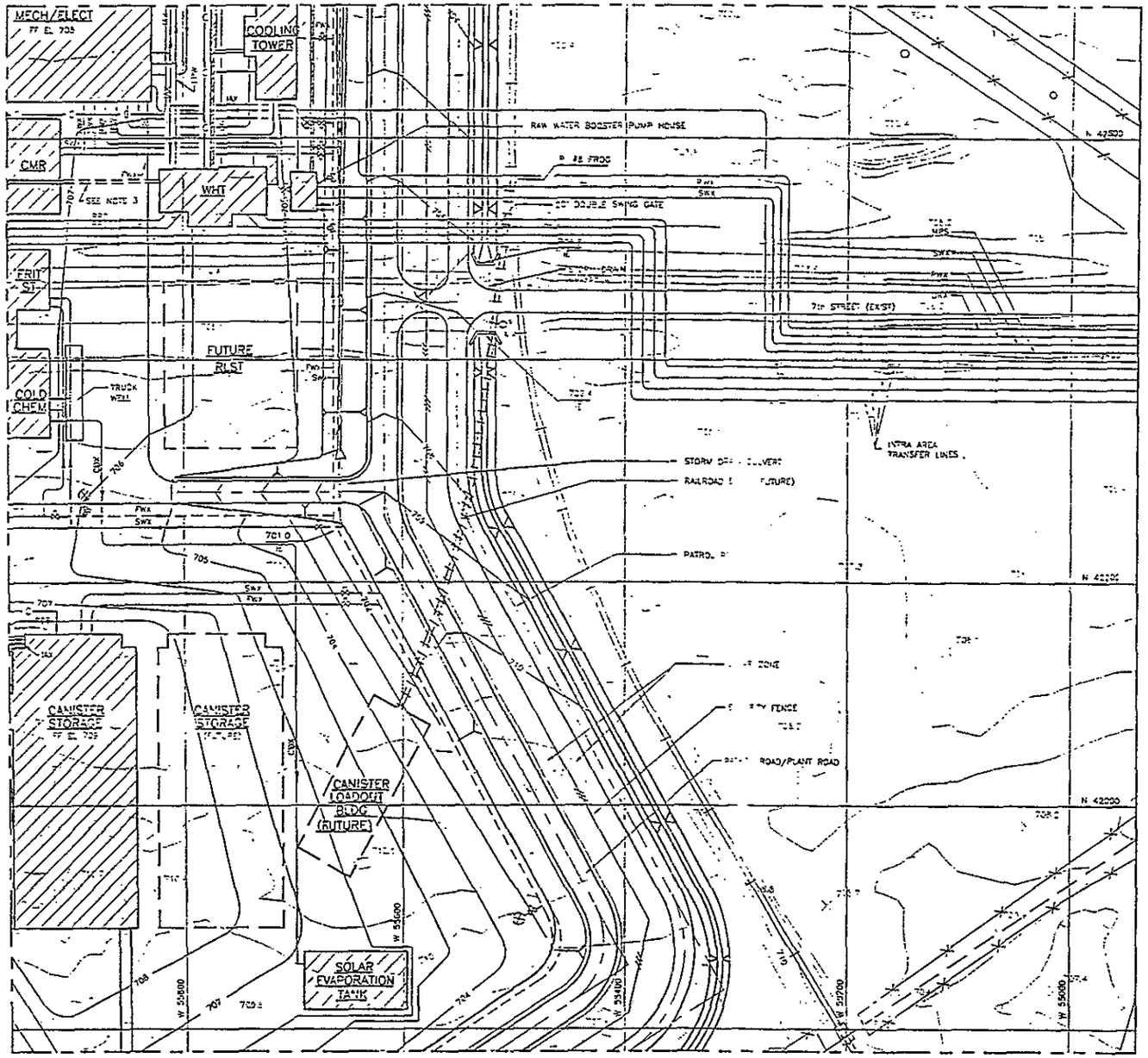
| | | | |
|---|---|---|---|
| SCALE | 1" = 40' | PROJECT NO. 8-595 | PLANT NO. 845724 |
| DWG. NO. | | | |
| SHEET NO. 1 | | | |

| | | | | | |
|---|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117112 | 1 | 1 | 0 |

AC117112

9112716 0

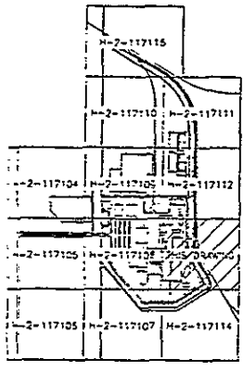
MATCH LINE SEE DWG. H-2-117112




MATCH LINE SEE DWG. H-2-117108

DWG. LIMIT W 54960

MATCH LINE SEE DWG. H-2-117114




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.
3. 36"ø ZONE C EXHAUST 3'-0" MIN. BELOW GRADE TO CMR. RUN OVER ROOF OF CMR. RISE TO 4TH FLOOR HVAC ROOM & CONNECT TO ZONE B EXHAUST STACK IN 4TH FLOOR HVAC ROOM

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | | | | |
|---|---|---|---|---|---|---|
| 0 | 10/26/90 | REVISED COOLING TOWER, WHT, BOOSTER PUMP HOUSE SIZES AND TRANSFER LINES LOCATION FOR PROJ. BASELINE CONTROL PER CR HWVO-0447 | BC | | RK | RJ |
| 00 | 9/3/90 | RELEASED FOR DETAIL DESIGN | BC | | GK | EJ |

ENGINEERING RELEASE
REV _____ DATE _____
EPG _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-76RL1830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

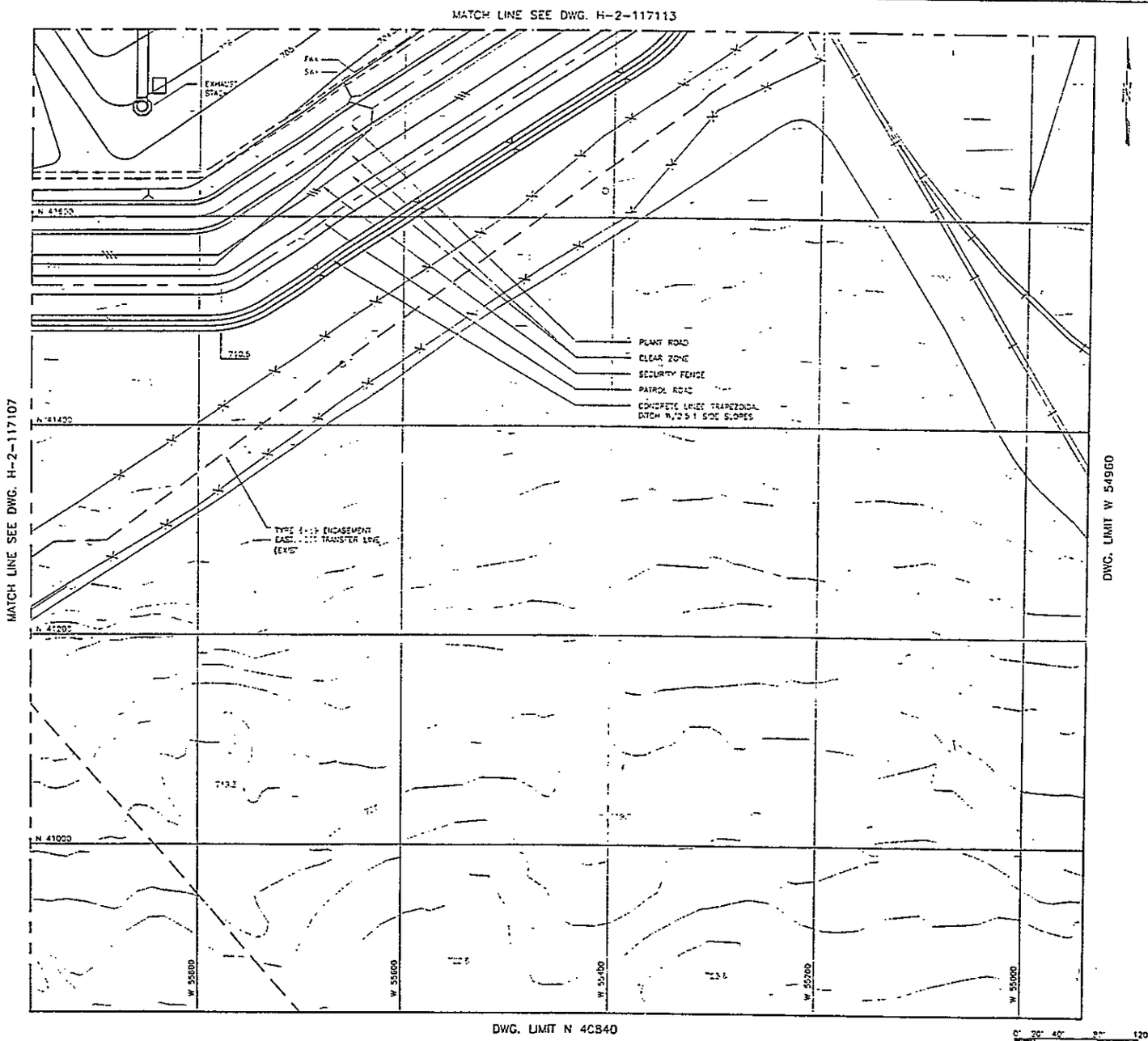
| | | |
|---|---|---|
| R N GIBBONS | 10-5-90 | |
| G P CHAWLA | 10-5-90 | |
| F G BROOKS | 10-5-90 | |
| T L SMETS | 10-5-90 | |
| E A JACOBS | 10-5-90 | |
| G KULANOFF | 10-5-90 | |
| J P SOTO | 10-5-90 | |
| M G KEEFE | 10-5-90 | |
| B H CONLEY | 10-5-90 | |

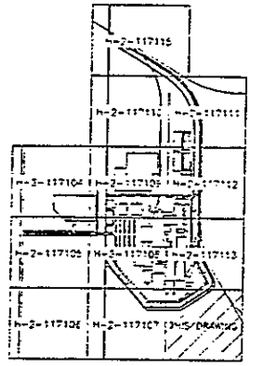
| | | | |
|---|---|---|---|
| B-595 | 845724 | 3101 | |
| 1" = 40' | | | |
| NONE | NOT REQ'D | H-2-117113 | 1 / 1 / 0 |

GRAPHIC SCALE 0' 20' 40' 80' 120'

9 1 1 2 1 1 7 0 2 1 1 6

9 1 1 2 1 7 0 9 1 2



KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| D | 9/4/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | SC / 10/26/90 / RJ |
| CC | 9/5/90 | RELEASED FOR DETAIL DESIGN | SC / 11/1/90 / CK / RJ |

CDG | FGS | GPC | RNC

ENGINEERING RELEASE
REV ____ DATE ____
ERD ____

| | |
|---|---|
| P.K. GIBBONS | 10-5-90 |
| D.P. CHAWLA | 10-5-90 |
| F.D. BROOKS | 10-5-90 |
| J.H. SMETS | 10-5-90 |
| E.R. JACOBS | 10-5-90 |
| G. KURLANOFF | 10-5-90 |
| J.P. SOTO | 10-5-90 |
| H.O'KEEFE | 10-5-90 |
| B.H. CONLEY | 10-5-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RE = ACCOMMODATION

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

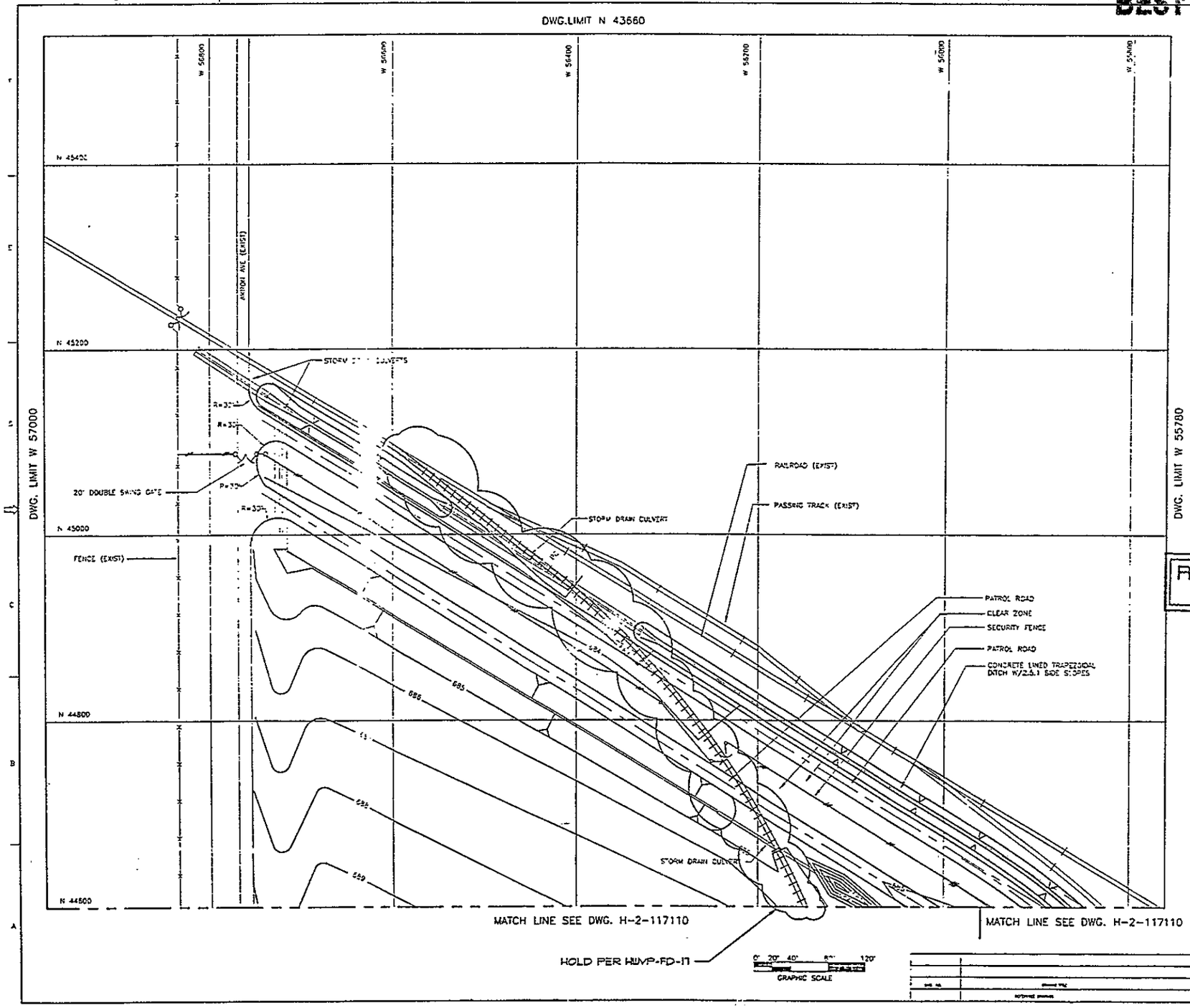
HANFORD WASTE VITRIFICATION PLANT

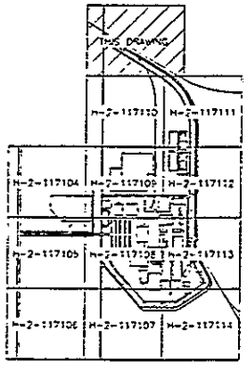
| | | | |
|---|---|---|---|
| B-595 | 845724 | 3101 | |
| 1"=40' | | | |

NONE | NOT REQ'D | H-2-117114 | 1 | 1 | 0

BEST AVAILABLE COPY

9 1 1 2 1 1 7 0 9 1 3




KEY PLAN

NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| D | REVISED TO INCLUDE EXISTING PASSING TRACK GRADING FOR CULVERT UNDER RR AND REVISED INDICES (EXISTS) PER SPURS PER OF HNF-PD-AND RELEASED FOR PROJECT BASELINE CONTROL | BC | 10/26/90 |
| 00 | 9/6/90 RELEASED FOR DETAIL DESIGN | BC / CK / CK / EJ | |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
GRADING AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| DRAWN | R N GIBBONS | 15-01-90 | |
| DESIGNED | O P CHAWLA | 10-05-90 | |
| CHECKED | T J BROOKS | 10-05-90 | |
| ENGINEER | J J SUETS | 10-31-90 | |
| PROJECT ENGINEER | E R JACOBS | 10-31-90 | |
| ENGINEER MANAGER | C KULANOFF | 10-31-90 | |
| APPROVED | R P SOTO | 10-31-90 | |
| APPROVED | H O KEEFE | 10-31-90 | |
| APPROVED | E H OAKLEY | 10-31-90 | |

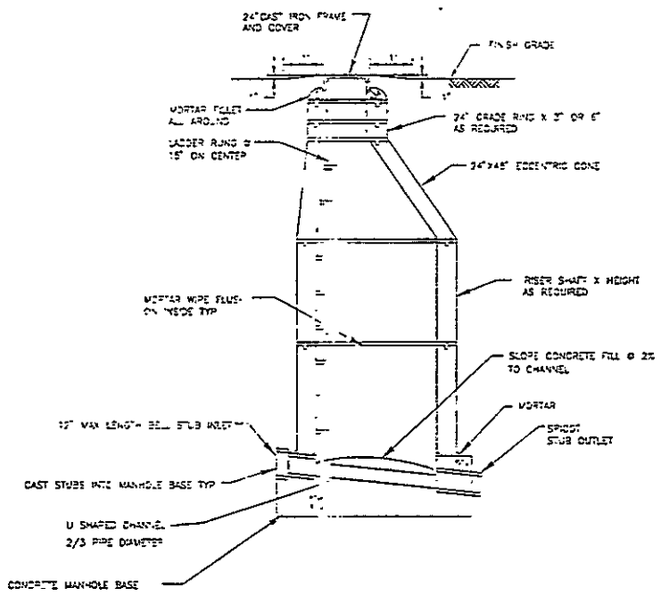
SCALE: 1" = 40'
PROJECT NO.: B-595
DRAWING NO.: 845724
SHEET NO.: 3101

NONE | NOT REQ'D | H-2-117115 | 1 | 1 | 0

BEST AVAILABLE COPY

NOTES

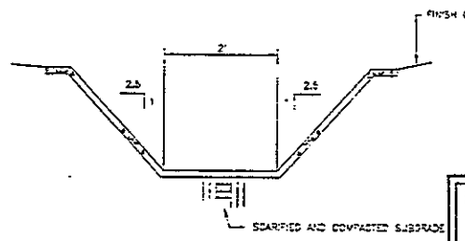
1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.




NOTE: WHEN THE DEPTH OF THE MANHOLE EXCEEDS 12', THE DIAMETER OF THE SHAFT SHALL BE 60" WITH A CONCRETE BASE OF 76", THE CONE SHALL BE 36" X 60" AND THE FRAME AND COVER 36"

TYPICAL PRECAST CONCRETE SANITARY SEWER MANHOLE DETAIL

NOT TO SCALE




TYPICAL CONCRETE LINED TRAPEZOIDAL DITCH SECTION

NOT TO SCALE

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | EC / 10/26/90 |
| 00 | 9/3/90 | RELEASED FOR DETAIL DESIGN | BC / GK / EJ / COG / FCB / OPC / RHG |

ENGINEERING RELEASE
REV ____ DATE ____
CHG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
SECTIONS AND DETAILS

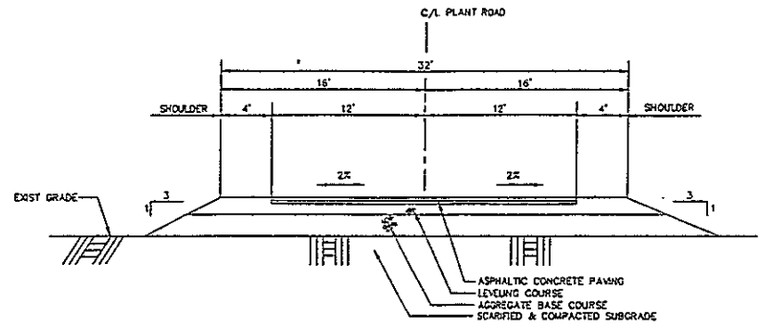
HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R.N. GIBBONS | 12-03-90 |
| S.D. CHAWLA | 12-03-90 |
| F.J. BROOKS | 12-03-90 |
| L.J. SMITH | 12-03-90 |
| E.A. JACOBS | 12-03-90 |
| G. KURLANOFF | 12-03-90 |
| J.R. SOTO | 12-03-90 |
| D.M. KEEFE | 12-03-90 |
| G.H. CONLEY | 12-03-90 |

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3102 | |
| NONE | | | |
| NONE | NOT REQ'D | H-2-117120 | 1 / 1 / 0 |

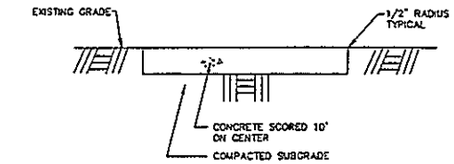
9 1 1 2 1 3 7 0 9 1 4

BEST AVAILABLE COPY




TYPICAL PLANT ROAD SECTION

NOT TO SCALE

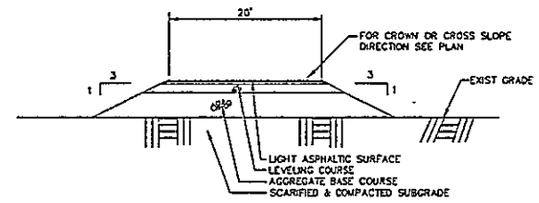



TYPICAL WALKWAY DETAIL

NOT TO SCALE

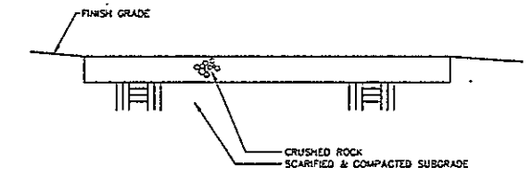
NOTES:

1. SEE DRAWING NUMBER H-2-117101 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117102 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.




TYPICAL ACCESS ROAD

NOT TO SCALE



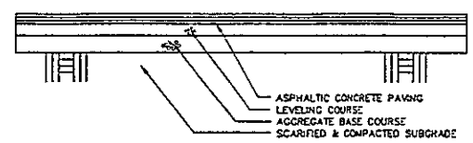

TYPICAL CRUSHED ROCK SURFACING DETAIL

NOT TO SCALE

RELEASED FOR PROJECT BASELINE CONTROL

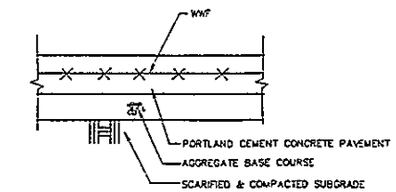
RELEASED FOR PROJECT BASELINE CONTROL

OCT 29 1990




TYPICAL ASPHALTIC CONCRETE PAVING SECTION

NOT TO SCALE




TYPICAL CONCRETE PAVING DETAIL

NOT TO SCALE

| REV NO. | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | 10/19/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HNVP-0449 | RC, DS, DPZ, EJ |
| 00 | 10/5/90 | RELEASED FOR DETAIL DESIGN | BC, CH, EJ; CDC, FGB, DPC, RHG |

ENGINEERING RELEASE
REV ____ DATE ____
CKD ____

| | DATE |
|---|---|
| R H GIBBONS | 03-01-91 |
| D P CHAWLA | 03-01-91 |
| F G BROOKS | 03-31-91 |
| J L SVETS | 03-31-91 |
| E R JACOBS | 03-31-91 |
| G KURLANOFF | 03-31-91 |
| J R SOTO | 03-31-91 |
| M O'KEEFE | 03-31-91 |
| B H CONLEY | 03-31-91 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10836

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

FINAL SITE
SECTIONS AND DETAILS

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| DRAWING NO. B-595 | FLUOR DANIEL DRAWING NO. 845726 | PAGE NO. 3102 | |
| SCALE NONE | | | |
| SUPERSEDED BY NONE | NOT REQ'D | DRAWING NUMBER H-2-117121 | SHEET 1 OF 1 REV. 0 |

AA117121

9112170915

9 1 1 2 1 3 7 0 9 1 6

PROJECT TITLE:

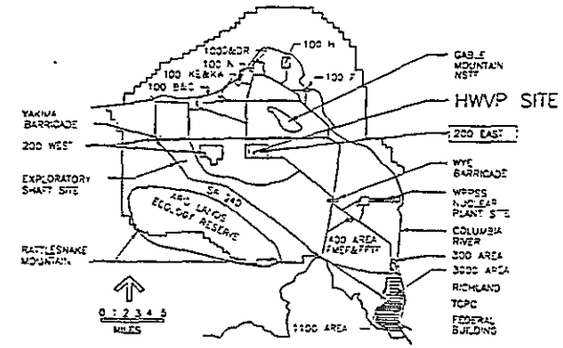
# B-595 HWVP-HANFORD WASTE VITRIFICATION PLANT

FOR:

## U.S. DEPARTMENT OF ENERGY RICHLAND OPERATIONS OFFICE

BY: FLUOR DANIEL, INC

## PRELIMINARY DESIGN SITE LAYOUT




HANFORD AREA MAP

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | |
| 00 | 5/31/90 | RELEASED FOR DETAIL DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
CPO

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - ACON-Richl.500.DM

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
TITLE SHEET

| | |
|---|---|
| R.N.GIBBONS | 10-26-90 |
| D.P.CHAWLA | 10-26-90 |
| F.C.BROOKS | 10-26-90 |
| J.L.SUETS | 10-26-90 |
| E.H.JACOBS | 10-26-90 |
| G.KUELANOFF | 10-26-90 |
| J.R.SOTO | 10-26-90 |
| H.O'KEEFE | 10-26-90 |
| S.H.CONLEY | 10-26-90 |

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3102 | |
| NONE | | | |
| NONE | NOT REQ'D | H-2-117200 | 1 / 1 / 0 |

AA017200

| DOCUMENT NO. | REVISION | TITLE |
|---|---|---|
| CIVIL | | |
| H-2-117200 | 0 | CONSTRUCTION SUPPORT FACILITIES, TITLE SHEET |
| H-2-117201 | 0 | CONSTRUCTION SUPPORT FACILITIES, DRAWING INDEX |
| H-2-117202 | 0 | CONSTRUCTION SUPPORT FACILITIES, LEGEND, ABBREVIATIONS INDEX AND GENERAL NOTES |
| H-2-117203 | 0 | OVERALL CONSTRUCTION SUPPORT FACILITIES, PAVING PLAN |
| H-2-117204 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117205 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117206 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117207 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117208 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117209 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117210 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117211 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117212 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117213 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117214 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117215 | 0 | CONSTRUCTION SUPPORT FACILITIES, SITE LAYOUT AND UTILITIES PLAN |
| H-2-117220 | 0 | CONSTRUCTION SUPPORT FACILITIES, SECTIONS AND DETAILS |
| H-2-117221 | 0 | CONSTRUCTION SUPPORT FACILITIES, SECTIONS AND DETAILS |

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWP-0449 | BC BS / DK / EJ / CDC / FGB / DPC / RHC |
| CC | 7/6/90 | RELEASED FOR DETAIL DESIGN | BS / DK / DK / EJ |

ENGINEERING RELEASE
REV ____ DATE ____
ERO

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
DRAWING INDEX

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| DRAWN BY | R.N.GIBBONS 10-9-90 |
| DESIGNED BY | D.P.CHAWLA 10-9-90 |
| ENGINEERED BY | F.G.BROOKS 10-31-90 |
| PROJECT ENG. | J.L.SMETS 10-31-90 |
| CHECKED BY | C.R.JACOBS 10-31-90 |
| APPROVED BY | G.KUTLANOFF 10-31-90 |
| PROJECT ENG. | J.R.SOTO 10-31-90 |
| PROJECT MGR. | H.O'KEEFE 10-31-90 |
| CONSTRUCTION MGR. | B.H.CONLEY 10-31-90 |

PROJECT NO. B-595 ; 845724 ; 3101
DWG. NO. NONE

NONE | NOT REQ'D | H-2-117201 | 1 | 1 | 0

AAC17201

9111270117

## ABBREVIATION INDEX

| | |
|---|---|
| & | AND |
| AC | ASPHALTIC CONCRETE |
| @ | AT |
| AVE | AVENUE |
| CI | CAST IRON |
| CTR | CENTER |
| C/L | CENTER LINE |
| CHEM | CHEMICAL |
| CMR | CONTACT MAINTENANCE ROOM |
| DWG | DRAWING |
| EXIST | EXISTING |
| FAB SHOP | FABRICATION SHOP |
| FRIT ST | FRIT STORAGE |
| GFE | GOVERNMENT FURNISHED EQUIPMENT |
| HWVP | HANFORD WASTE VITRIFICATION PLANT |
| KVA | KILOVOLT-AMP |
| KV | KILOVOLT |
| MIN | MINIMUM |
| MRB | MANIPULATOR REPAIR BUILDING |
| CMO | CONSTRUCTION MANAGEMENT OFFICE |
| OC/REB | OPERATIONS CONTROL/REGULATED ENTRANCE FACILITY |
| PR | PAIR |
| R | RADIUS |
| RR | RAILROAD |
| TYP | TYPICAL |
| VIT BLDG | VITRIFICATION BUILDING |
| WHT | WASTE HOLD TANK VAULT AND BUILDING |
| W/ | WITH |

## LEGEND

| | |
|---|---|
| | CRUSHED ROCK PAVING |
| | ASPHALTIC CONCRETE PAVING |
| | EXISTING FENCE |
| | SECURITY FENCE |
| | RAILROAD |
| | EXISTING RAILROAD |
| SSMH | SANITARY SEWER MANHOLE |
| | FIRE HYDRANT |
| FW | FIRE WATER |
| RW | RAW WATER |
| SS | SANITARY SEWER |
| SW | SANITARY WATER |
| | VALVE |
| | UNIFORM SLOPE |
| | SUBSTATIONS AND BUILDINGS |
| | SECURITY LIGHTING (SEE [illegible] FOR DIRECTION) |
| | PARKING LOT LIGHTING |
| | ROADWAY LIGHTING |
| | AREA FLOODLIGHTING |
| | CONDUIT |
| | DIRECT BURIAL CABLE |
| | EXISTING 13.8KV POLE [illegible] TO BE REMOVED |
| | NEW REROUTED 13.8KV [illegible] |
| | 200PR TELEPHONE CABLE |
| | ELECTRICAL POLES |
| | GATE |
| | FACILITIES PROVIDED BY [illegible] THE GENERAL CONSTRUCTION CONTRACTOR |
| | ELECTRICAL UNDERGROUND DIRECT BURIAL CABLE TRENCH |

## GENERAL NOTES:

1. ELECTRICAL CONDUIT SHALL BE 2" HIGH-IMPACT PVC PLASTIC WITH 3" MINIMUM CONCRETE ENCASEMENT ON ALL SIDES. MINIMUM COVERAGE TO THE TOP OF CONCRETE SHALL BE 1'-6".
2. ELECTRICAL DIRECT BURIAL CABLE SHALL BE THREE CONDUCTOR WITH GROUND AND SHALL HAVE MINIMUM COVER OF 2'-0".
3. THE MAXIMUM GRADE ON THE RAILROAD SPUR IS 0.01 THE FROGS WILL BE NUMBER 8.
4. ALL ROADS WILL HAVE A MINIMUM EDGE OF PAVEMENT RADIUS OF 30'.
5. THE SANITARY SEWER SYSTEM WILL HAVE A MINIMUM SLOPE OF 0.005 AND THE MAXIMUM SPACING BETWEEN MANHOLES WILL BE 150'. SEWER LINE WILL HAVE A MINIMUM OF 3' OF COVER

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY | CHK | APP |
|---|---|---|---|---|---|
| C | 10/26/90 | REVISED LEGEND, 13.8KV SUBSTATIONS AND BUILDINGS AND ADDED ELEC UG SYMBOL PER CR HWVP-0449 & RELEASED FOR PROJECT BASE LINE CONTROL | SC | HP | GE |
| 00 | 10/5/90 | RELEASED FOR DETAIL DESIGN | BC | CK | EJ |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

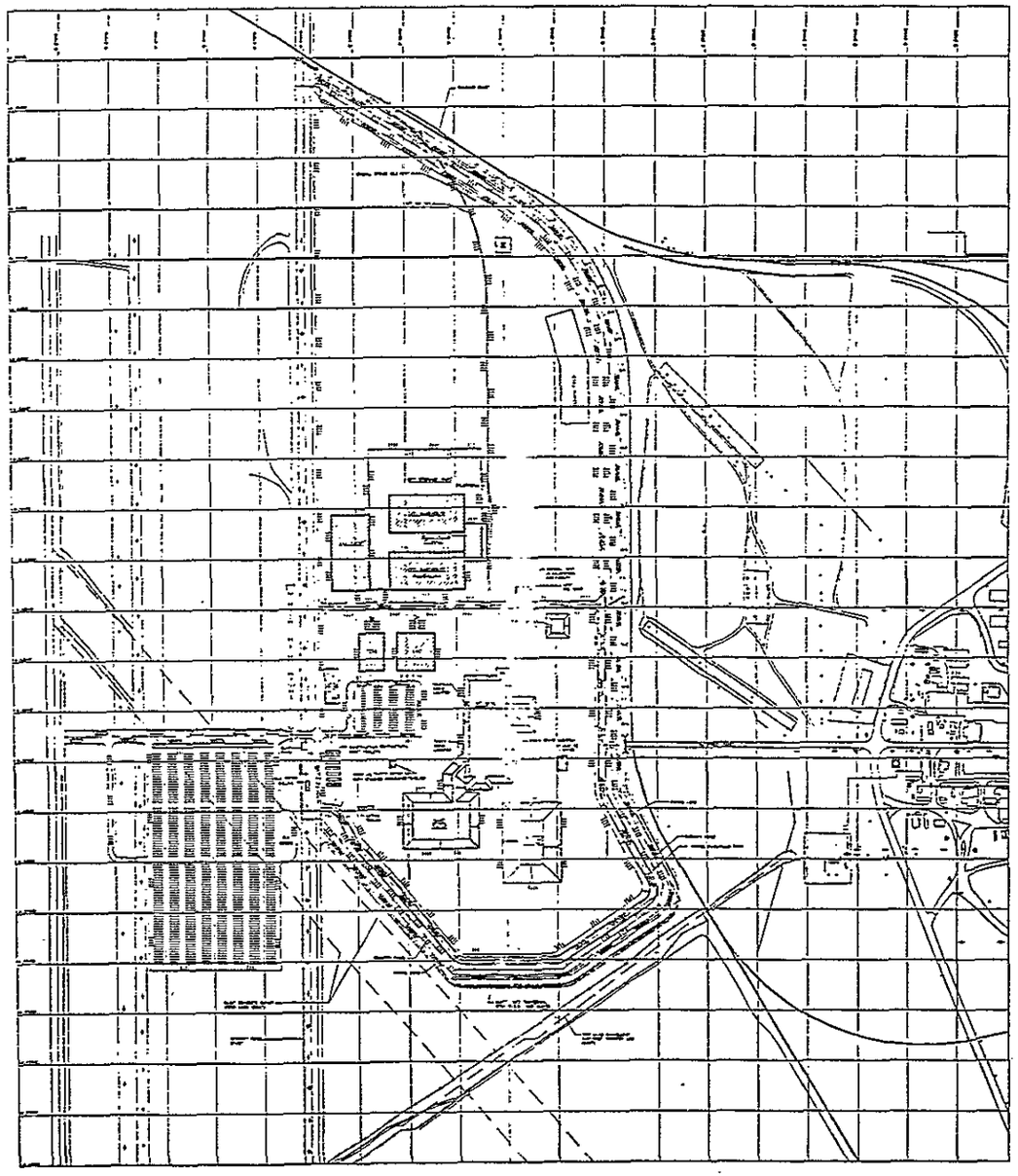
CONSTRUCTION SUPPORT FACILITIES
LEGEND ABBREVIATIONS INDEX AND GENERAL NOTES

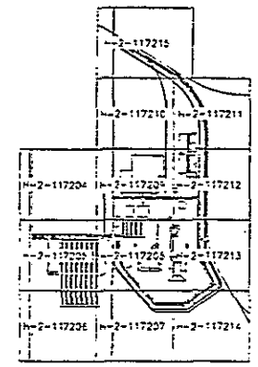
HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| S. GIBBONS | 10-26-90 |
| C. CHAWLA | 10-26-90 |
| J. BROOKS | 10-26-90 |
| J. SWETS | 10-26-90 |
| F. JACOBS | 10-26-90 |
| J. AUHLANDOFF | 10-26-90 |
| J.R. SOTO | 10-26-90 |
| M. O'KEEFE | 10-26-90 |
| B. MCCONLEY | 10-26-90 |

| | | | |
|---|---|---|---|
| CONTRACT NO. | B-595 | DWG NO. | 845724 |
| SHEET | 1 | OF | 3102 |
| NONE | | | |

NONE | NOT REQ'D | H-2-117202 | 1 | 1 | 0






KEY PLAN

BEST AVAILABLE COPY

NOTES

1 SEE DRAWING NUMBER H-2-117201 FOR DRA INDEX.

2 SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES

RELEASED FOR PROJECT BASELINE CONTROL

LEGEND

ASPHALTIC CONCRETE PAVING

CRUSHED ROCK SURFACE

OCT 26 1990

GRAPHIC SCALE

| REV | DATE | DESCRIPTION | BY | CHK | APP |
|---|---|---|---|---|---|
| D | 10/26/90 | CHANGED GAS TO DIC WITH DIESEL WITH LEAD FEED INTERCEPT FROM A 1000 PASTAN TRACK & SWITCH UNDER RE PER CR 90-1-0-0-0 FOR A PROJECT FOR PROJECT BASELINE CONTROL | | | |
| CD | 5/5/90 | RELEASED FOR INITIAL DESIGN | | | |

ENGINEERING RELEASE
REV ____ DATE ____
ERO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10836

FLUOR DANIEL, INC
ADVANCED TECHNOLOGY DIVISION

OVERALL
CONSTRUCTION SUPPORT FACILITIES
PAVING PLAN

HANFORD WASTE VITRIFICATION PLANT

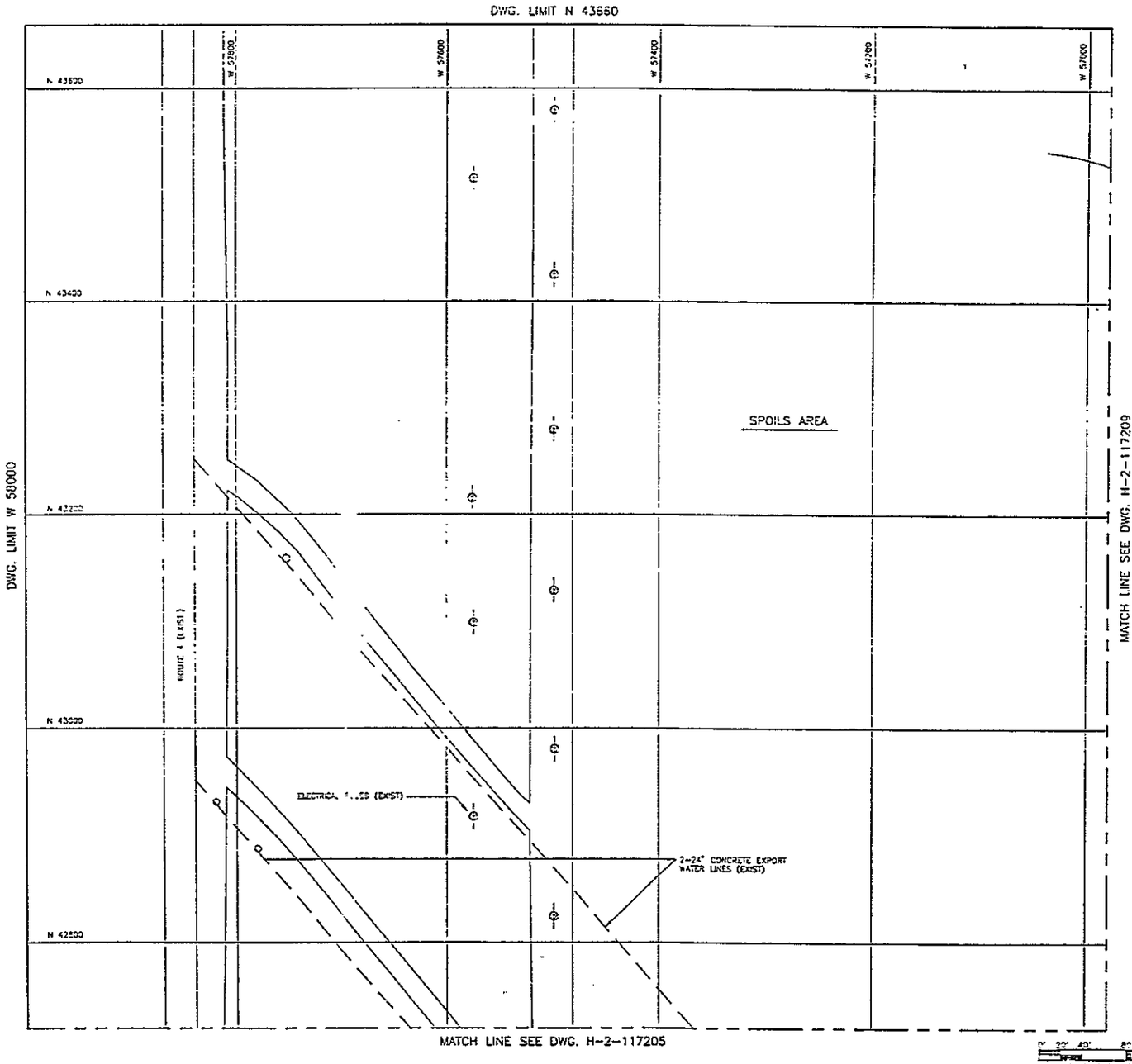
| | | | |
|---|---|---|---|
| DRAWN | R.N. GIBBONS | 10-2-90 | |
| DESIGNED | D.P. CHAWLA | 10-2-90 | |
| CHECKED | F.G. BROOKS | 10-5-90 | |
| APPROVED | J.S. SMITS | 10-26-90 | |
| REQ'D BY | E.R. JACOBS | 10-2-90 | |
| DESIGNED | G.KULANDER | 10-2-90 | |
| DESIGNED | J.R. SOTO | 10-2-90 | |
| DRAWN | P.D.KEETE | 10-2-90 | B-595 |
| DRAWN | S.H.CONLEY | 10-2-90 | 1"=200' |

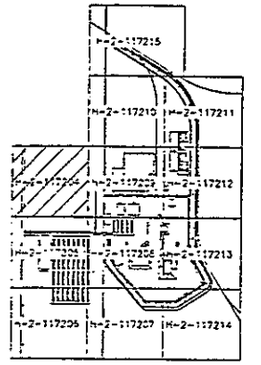
PROJECT NO. B-595
DATE 8/27/90
SCALE 1"=200'
DRAWING NUMBER H-2-117203
REV 1 1 0

NONE NOT REQ'D

H-2-117203

9112170619




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

GRAPHIC SCALE

| | | | |
|---|---|---|---|
| D | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | | |
| CD | RELEASED FOR DETAIL DESIGN | | |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

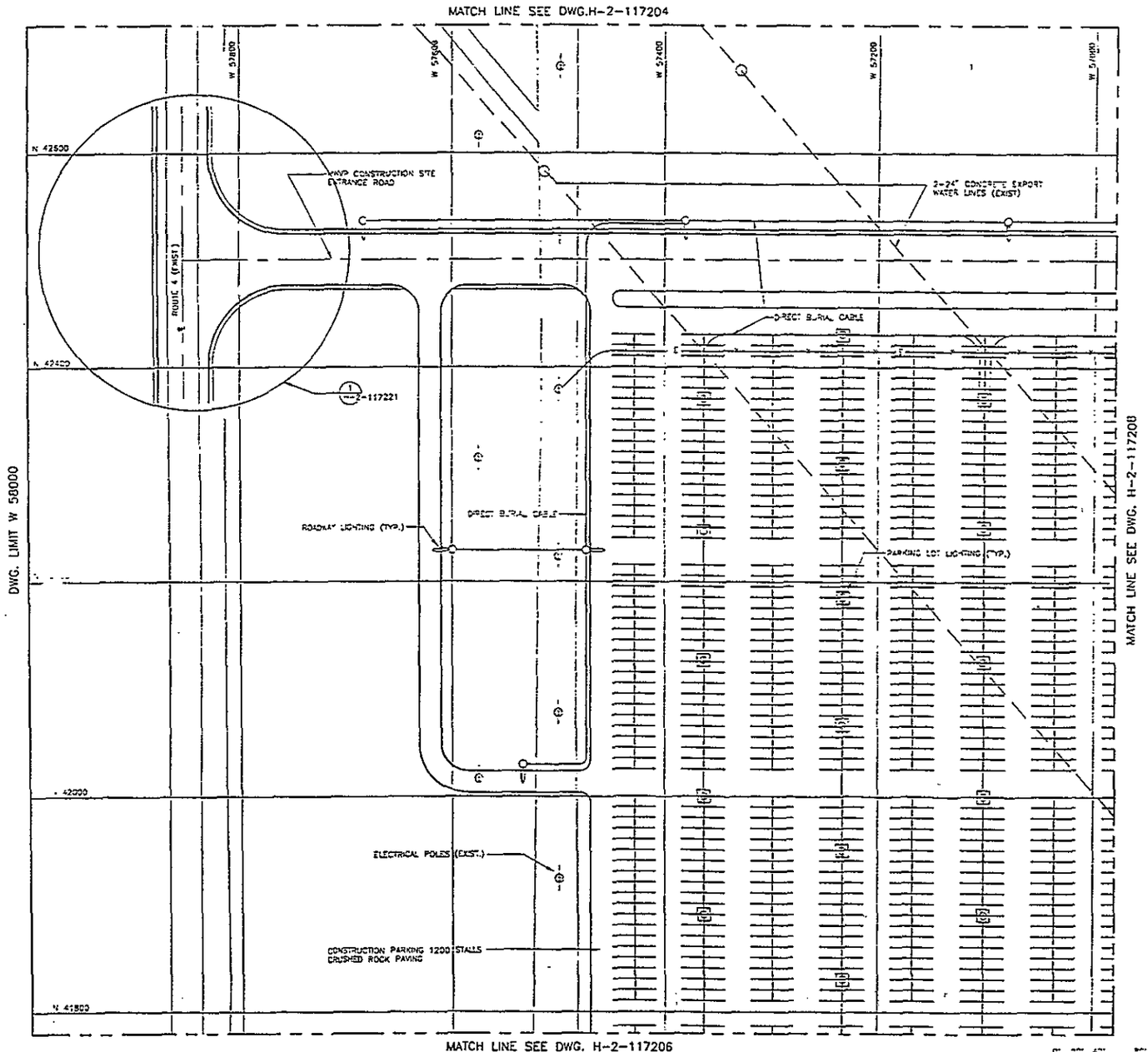
CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

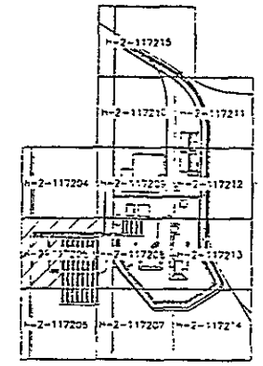
HANFORD WASTE VITRIFICATION PLANT

| | | | | | |
|---|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117204 | 1 | 1 | 0 |

AC117204

0 0 0 7 1 1 2 1 6




KEY PLAN

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NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

GRAPHIC SCALE 0' 40' 80' 120'

| REV | DATE | DESCRIPTION | |
|---|---|---|---|
| 0 | 8/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | SC / GK / RC / EJ |
| 00 | 8/26/90 | RELEASED FOR DETAIL DESIGN | SC / GK / EJ; CDS / FGB / OPC / RNG |

ENGINEERING RELEASE
REV ____ DATE ____
DWG

| | |
|---|---|
| R.N. GIBBONS | 10-25-90 |
| O.P. CHAVLA | 10-25-90 |
| F.G. BROOKS | 10-25-90 |
| J.L. SWETS | 10-25-90 |
| E.R. JACOBS | 10-25-90 |
| C. KULANOFF | 10-25-90 |
| J.R. SOTO | 10-25-90 |
| M.D. KEEFE | 10-25-90 |
| B.H. CONLEY | 10-25-90 |

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Richland Operations Office
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FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

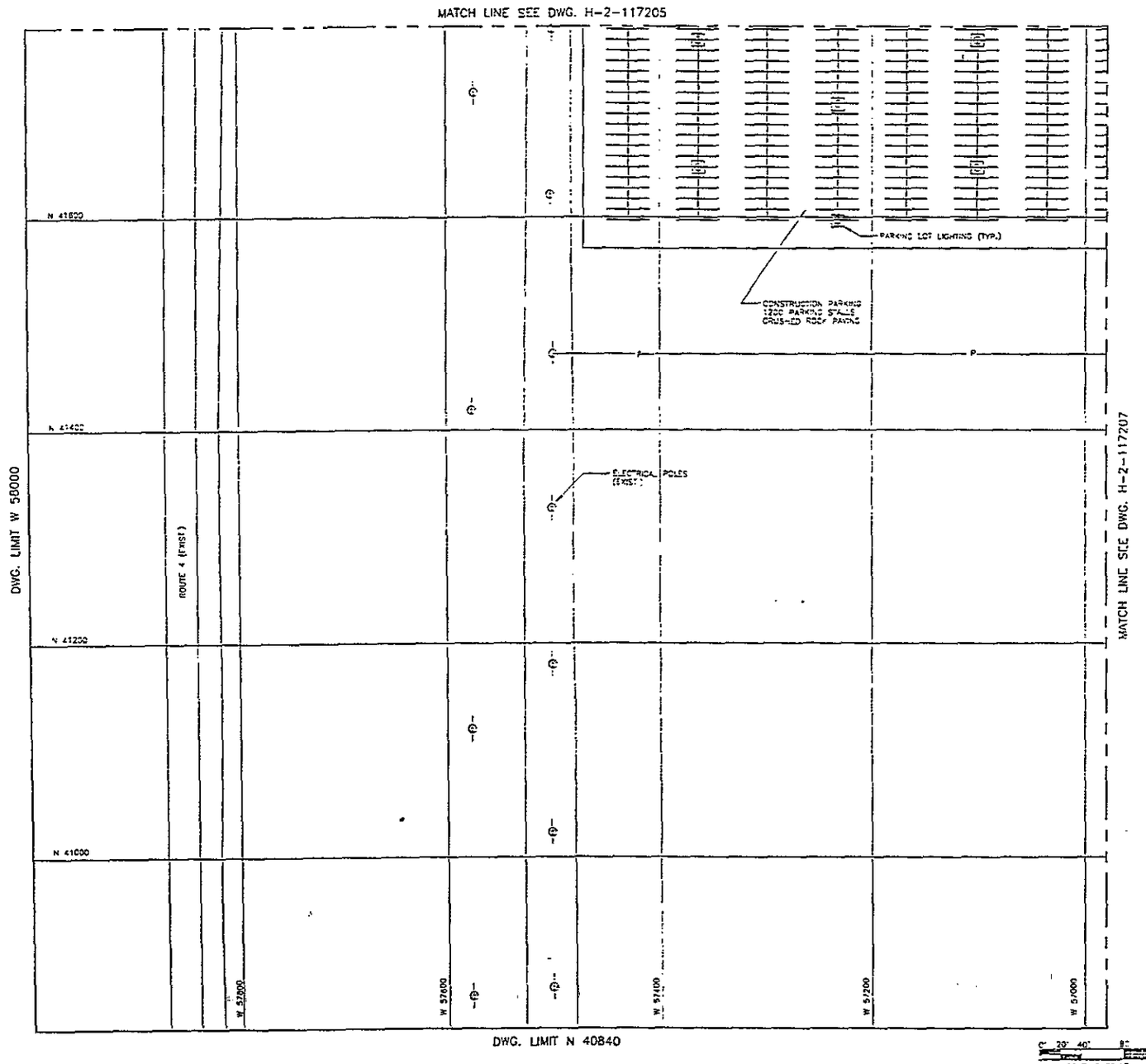
| | | | |
|---|---|---|---|
| Scale 1" = 40' | Drawing S-595 | Project 845724 | Dwg. No. 3102 |

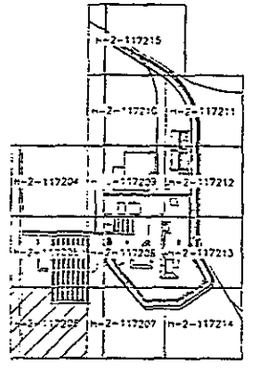
| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117205 | 1 | 0 |

A617235

9 1 1 2 1 1 7 0 9 1

9 1 1 2 1 7 0 9 2




KEY PLAN

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

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| | | | |
|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HNWP-0448 | BC 1 / 61 42 / 61 |
| CB | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC / CK / EJ; CDC / FCB / OFC / RHQ |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

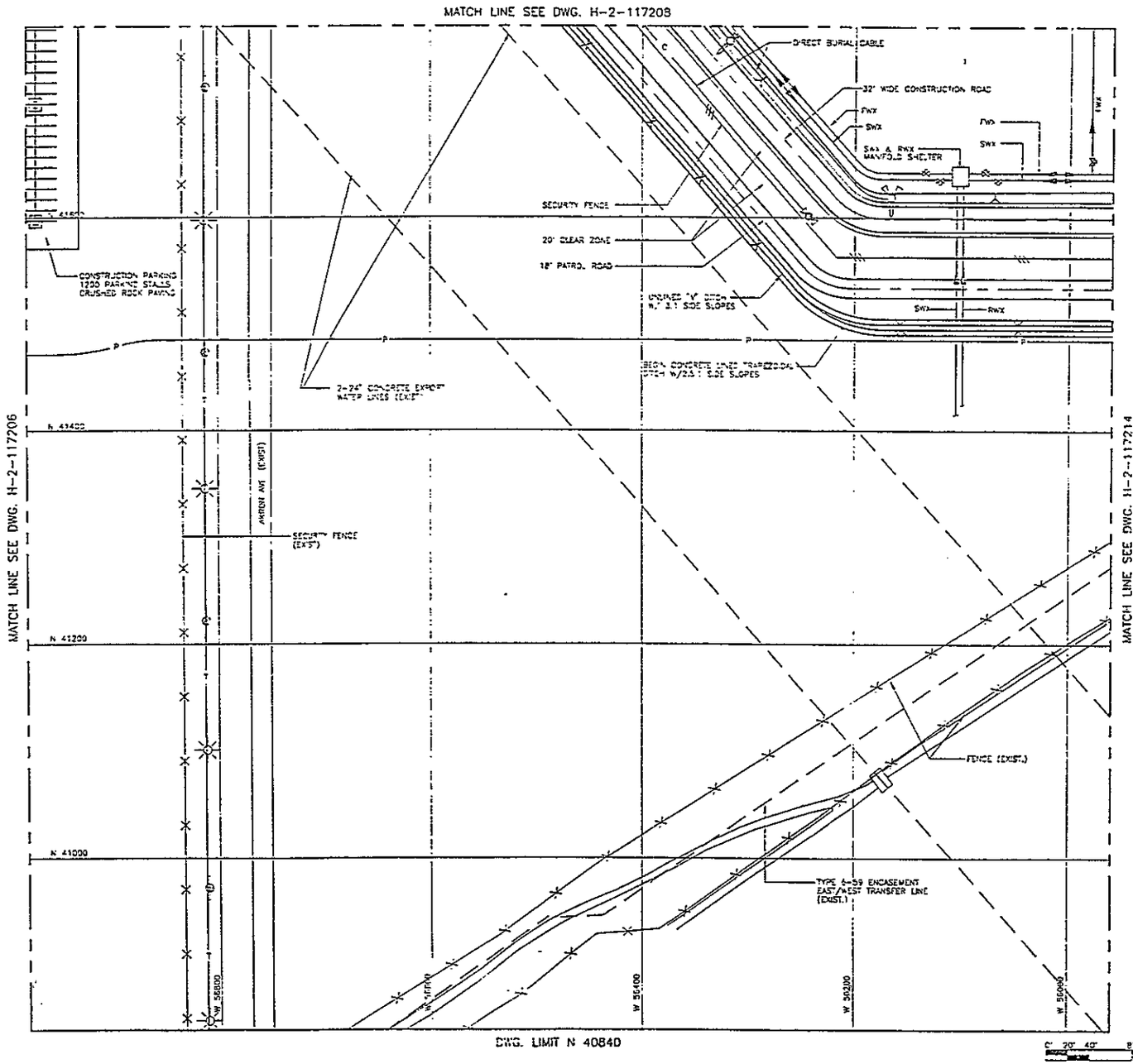
HANFORD WASTE VITRIFICATION PLANT

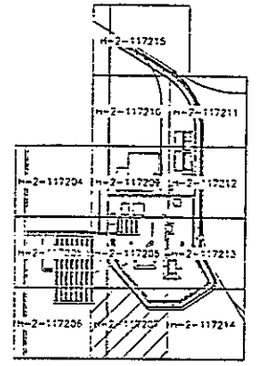
| | |
|---|---|
| R.A.GIBBONS | 10-26-90 |
| S.D.CHAWLA | 10-26-90 |
| T.J.BROOKS | 10-26-90 |
| J.J.SMETS | 10-26-90 |
| E.A.JACOBS | 10-26-90 |
| G.KULANOFF | 10-26-90 |
| J.R.SOTO | 10-26-90 |
| M.D.KEEFE | 10-26-90 |
| D.H.CONLEY | 10-26-90 |

B-595 | 845724 | 3102
1"=40'

NONE | NOT REQ'D | H-2-117206 | 1 | 1 | 0

9112170213




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY / CK / EN |
|---|---|---|---|
| D | 10/16/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HW/W-0449 | BC / CK / EN |
| CD | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC / CK / EN |

CDG | FGB | OPC | RHG

ENGINEERING RELEASE
REV ____ DATE ____
ERD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
P.O. Box 550, Richland, Washington

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| DRAWN BY | R N GIBBONS | 15-10-90 |
| DESIGN ENG | O P CHAWLA | 15-10-90 |
| DESIGN ENG | F C BROOKS | 15-10-90 |
| PROJ ENG | J L SMETS | 15-10-90 |
| PROJ ENG | E R JACOBS | 15-10-90 |
| PROJ ENG | G KURLANOFF | 15-10-90 |
| PROJ ENG | J R SOTO | 15-10-90 |
| PROJ ENG | H O'KEEFE | 15-10-90 |
| PROJ ENG | B H CONLEY | 15-10-90 |

CONTRACT NO. 9-595 | FLOOR DWG. NO. 045724 | DWG. NO. 3102

SCALE 1"=40'

| SUPERSEDES | SUPERSEDED BY | DRAWING NUMBER | SHEET | REV |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117207 | 1 | 0 |

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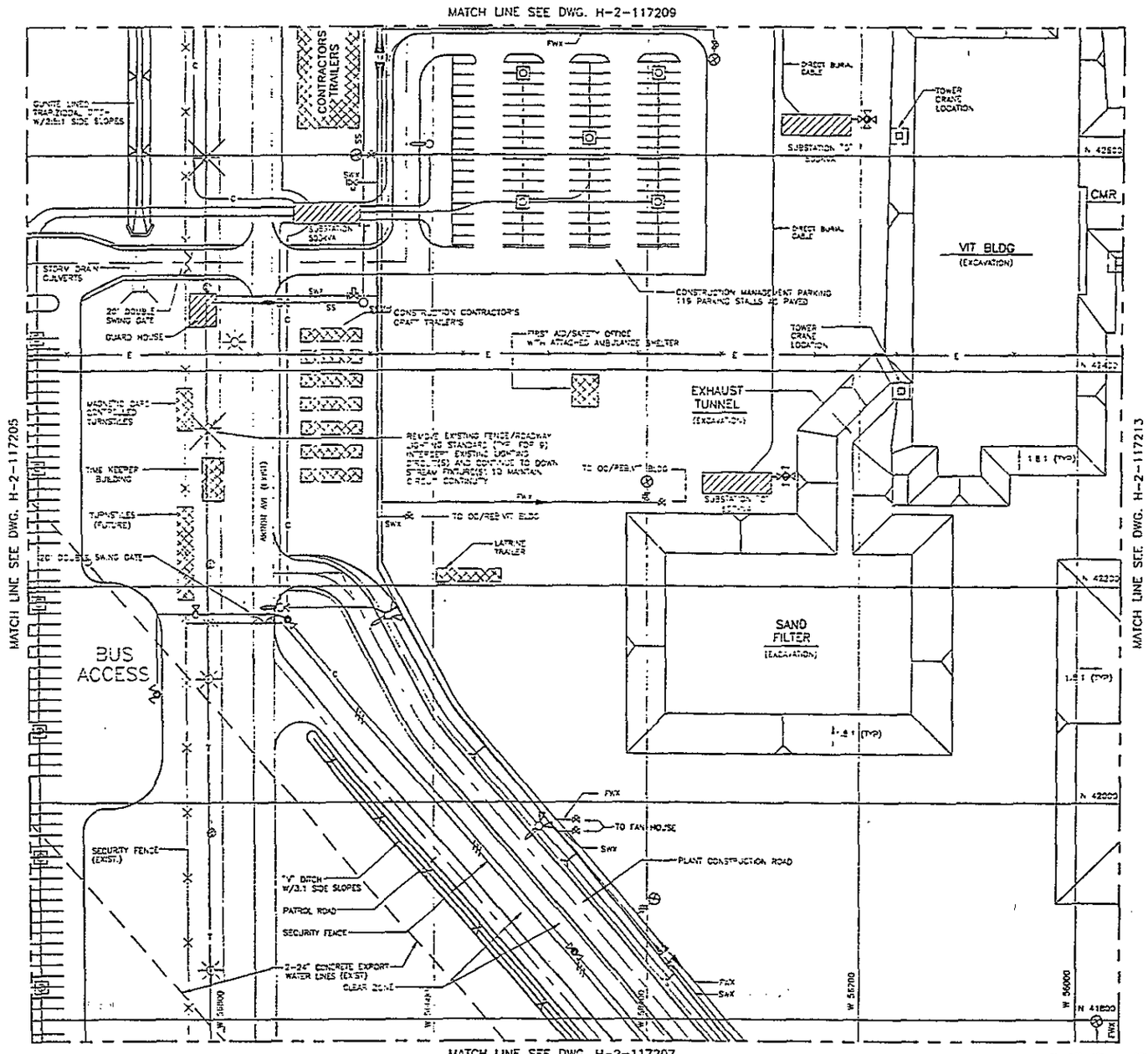
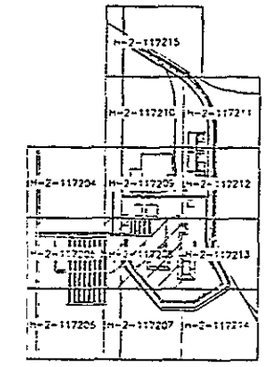



KEY PLAN

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | 10/26/90 | REVISED DIRECT BURIAL CABLE ROUTING, REMOVED SEWER LINE & MANHOLE AND REMOVED HOLES PER CP HWP-0449 AND RELEASED FOR PROJ BASELINE CONTROL | |
| 00 | 9/13/90 | RELEASED FOR DETAIL DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
CTC

| | |
|---|---|
| N.R. GIBBONS | 10-5-90 |
| O.P. CHAWLA | 10-5-90 |
| F.G. BROOKS | 10-5-90 |
| J.L. SMETS | 10-5-90 |
| E.R. JACOBS | 10-5-90 |
| D. KUKANOFF | 10-5-90 |
| J.R. SOTO | 10-5-90 |
| M.O'KEEFE | 10-5-90 |
| S.H. CONLEY | 10-5-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10930

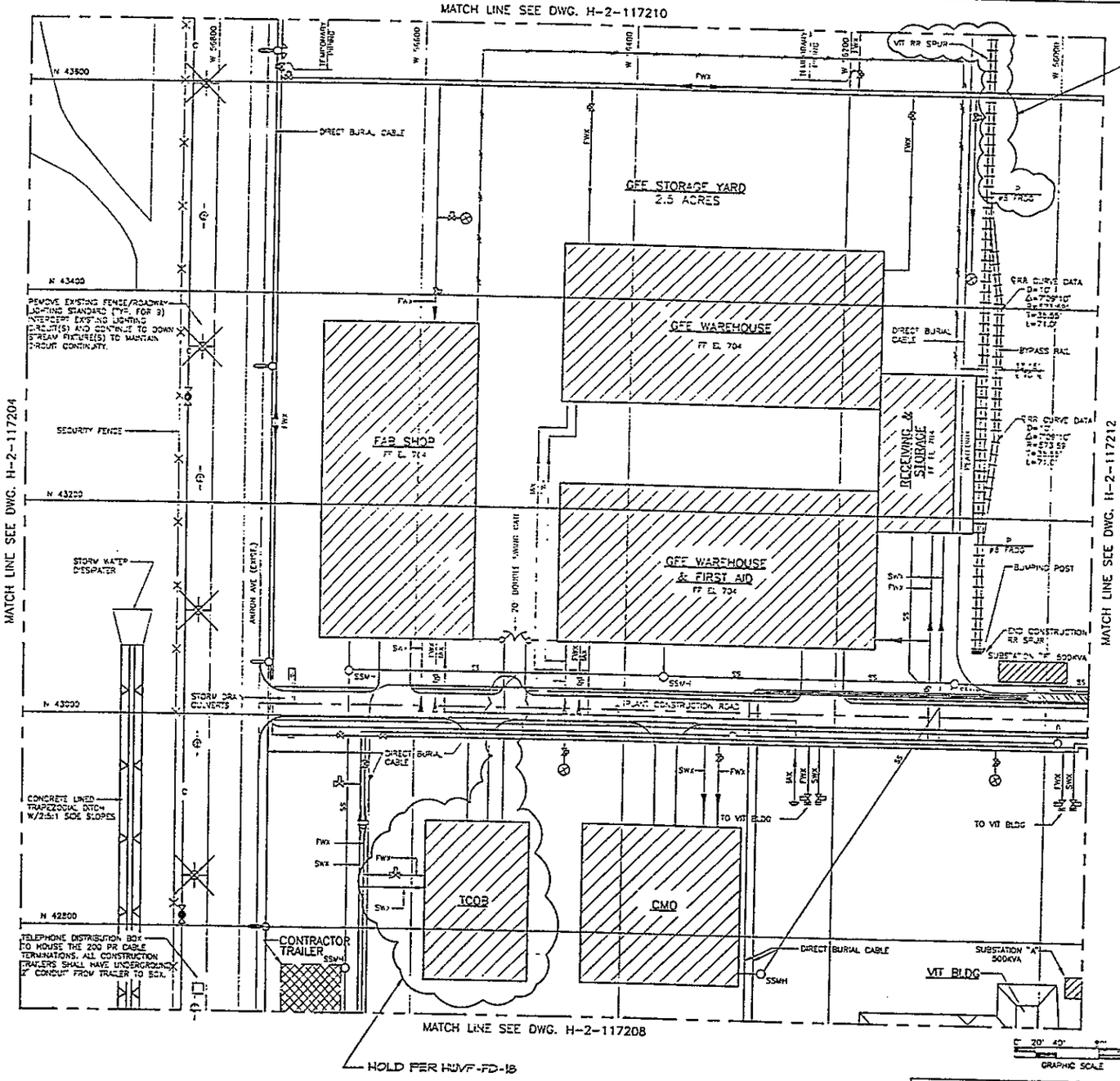
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

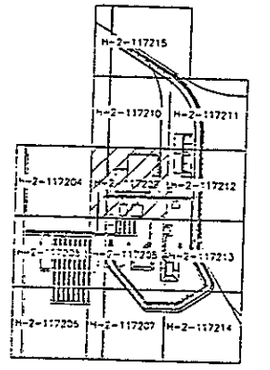
CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| 9-595 | 845724 | |
| 1"=40' | | |

NONE | NOT REQ'D | H-2-117208 | 1 | 1 | C




KEY PLAN

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

BEST AVAILABLE COPY

| REV | DATE | DESCRIPTION | BY | CK | EJ |
|---|---|---|---|---|---|
| C | | MOVED DIRECT BURIAL CABLE ROUTING AROUND NEW SWX & FWX TO GFF W-SE MOVED CONST. WAREHOUSE & FAR SHOP. SEWER LINES AND REMOVED HOLDS A" FWX LINES CONTRACTOR TRAILER & GFF WXSE PER CR HWVP-0449 RELEASED FOR PROJECT BASELINE CONTROL | BC | GK | EJ |
| B | 10/1/90 | RELEASED FOR DETAIL DESIGN | BC | GK | EJ |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

| | |
|---|---|
| R.N. GIBBONS | 10-3-90 |
| D.P. CHAWLA | 10-3-90 |
| J. GIBBONS | 10-3-90 |
| J.J. SMITS | 10-3-90 |
| E. RIACTORS | 10-3-90 |
| S. KURJANOFF | 10-3-90 |
| J.R. SOTO | 10-3-90 |
| L.D. KEEFE | 10-3-90 |
| S.M. CONLEY | 10-3-90 |

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Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

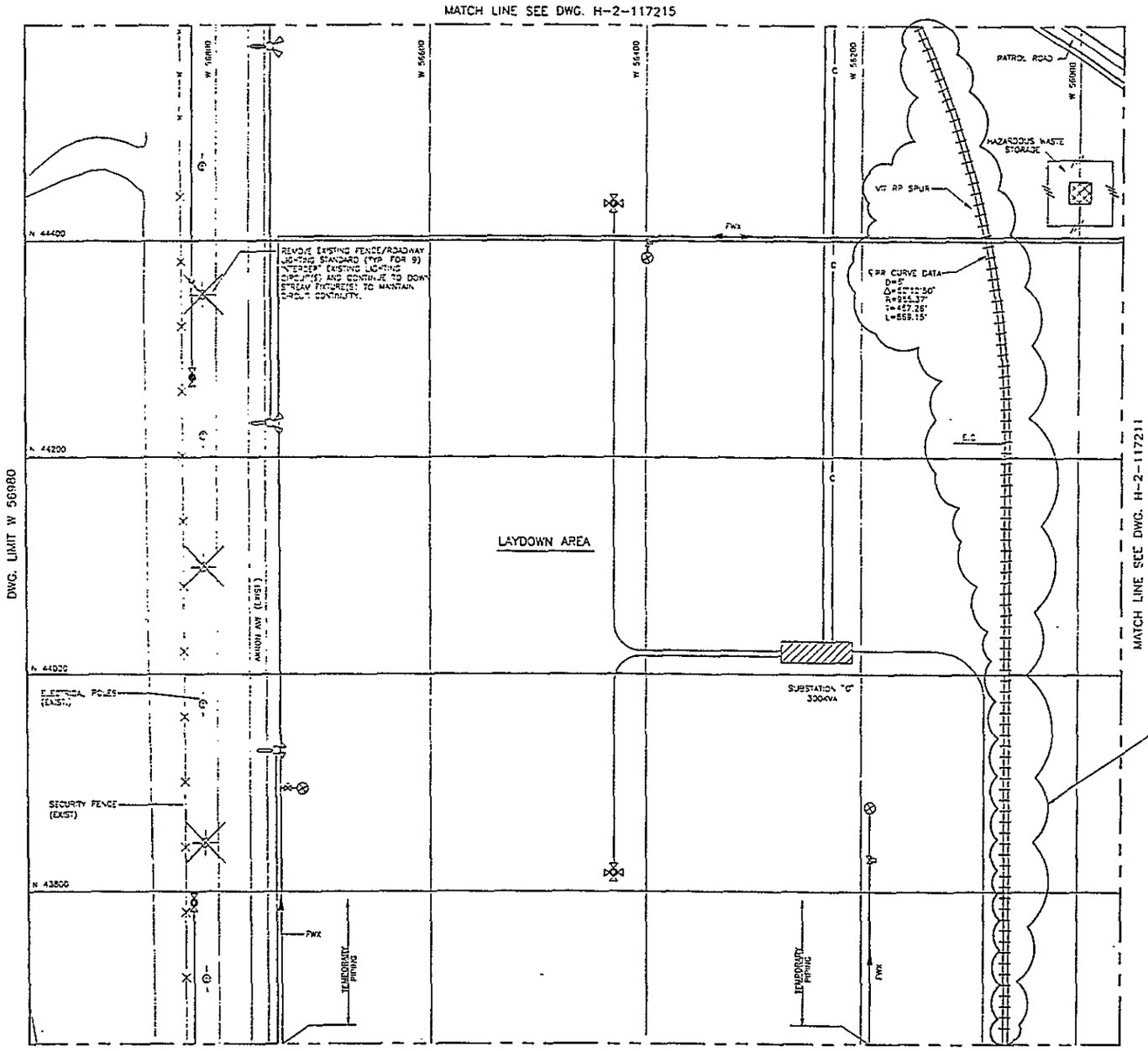
HANFORD WASTE VITRIFICATION PLANT

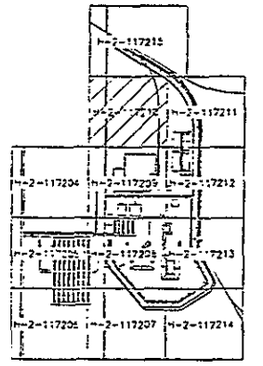
B-595 | 845724 | 3102
1" = 40'

NONE | NOT REQ'D | H-2-117209 | 1 | 1 | 0

AAC17209

9 1 1 2 0 7 0 3 : 5




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING No. [illegible] H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING No. [illegible] H-2-117202 FOR ABBREVIATIONS, LEGEND AND GEN[illegible] NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| C | 10/26/90 | REMOVED HOLDS AT FWX LINES AND LAYDOWN AREA. RELEASED FOR PROJECT BASELINE CONTROL. PER CR HNVP-0449 | |
| DG | 9/25/90 | RELEASED FOR DETAIL DESIGN | |

ENGINEERING RELEASE: PEV ____ DATE ____ ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R.N. GIBBONS | 10-5-90 |
| J.P. CHAWLA | 10-5-90 |
| F.G. BROOKS | 10-5-90 |
| T.L. EMETS | 10-31-90 |
| E.R. JACOBS | 10-31-90 |
| C. KURLANOFF | 10-31-90 |
| J.R. SOTO | 10-31-90 |
| H.O. KEEFE | 10-31-90 |
| B.N. CONLEY | 10-31-90 |

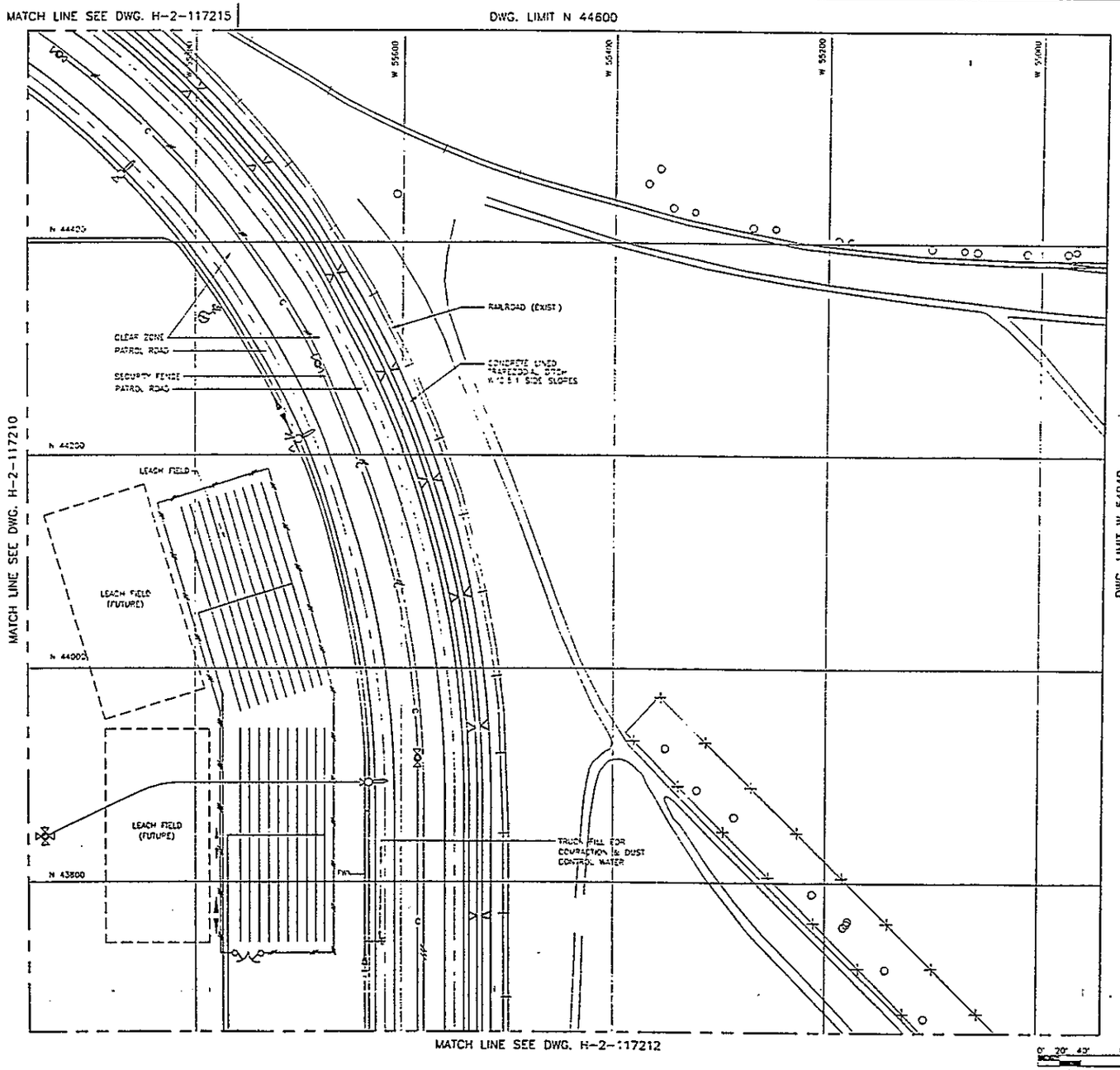
B-595 | 645724 | 3.02

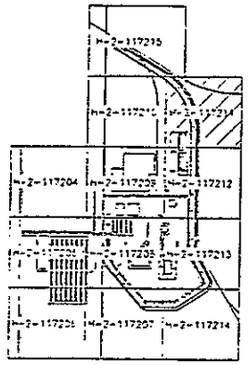
1" = 40'

NONE | NOT REQ'D | H-2-117210 | 1 | 1 | 0

AH017210

9 1 1 2 1 7 0 1 9 6




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY | CHK | ENG | CDG | FOR | DPC | RWS |
|---|---|---|---|---|---|---|---|---|---|
| D | | MOVED LEACH FIELD HAZARDOUS WASTE STORAGE AND LIGHTING REMOVED FWS LINE AND REMOVED HOLPS. RELEASED FOR PROJECT BASELINE CONTROL, REF CR HNVP-0449 | | | | | | | |
| DD | 10/5/90 | RELEASED FOR DETAIL DESIGN | | | | | | | |

ENGINEERING RELEASE
REV ____ DATE ____
ERD ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-76RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

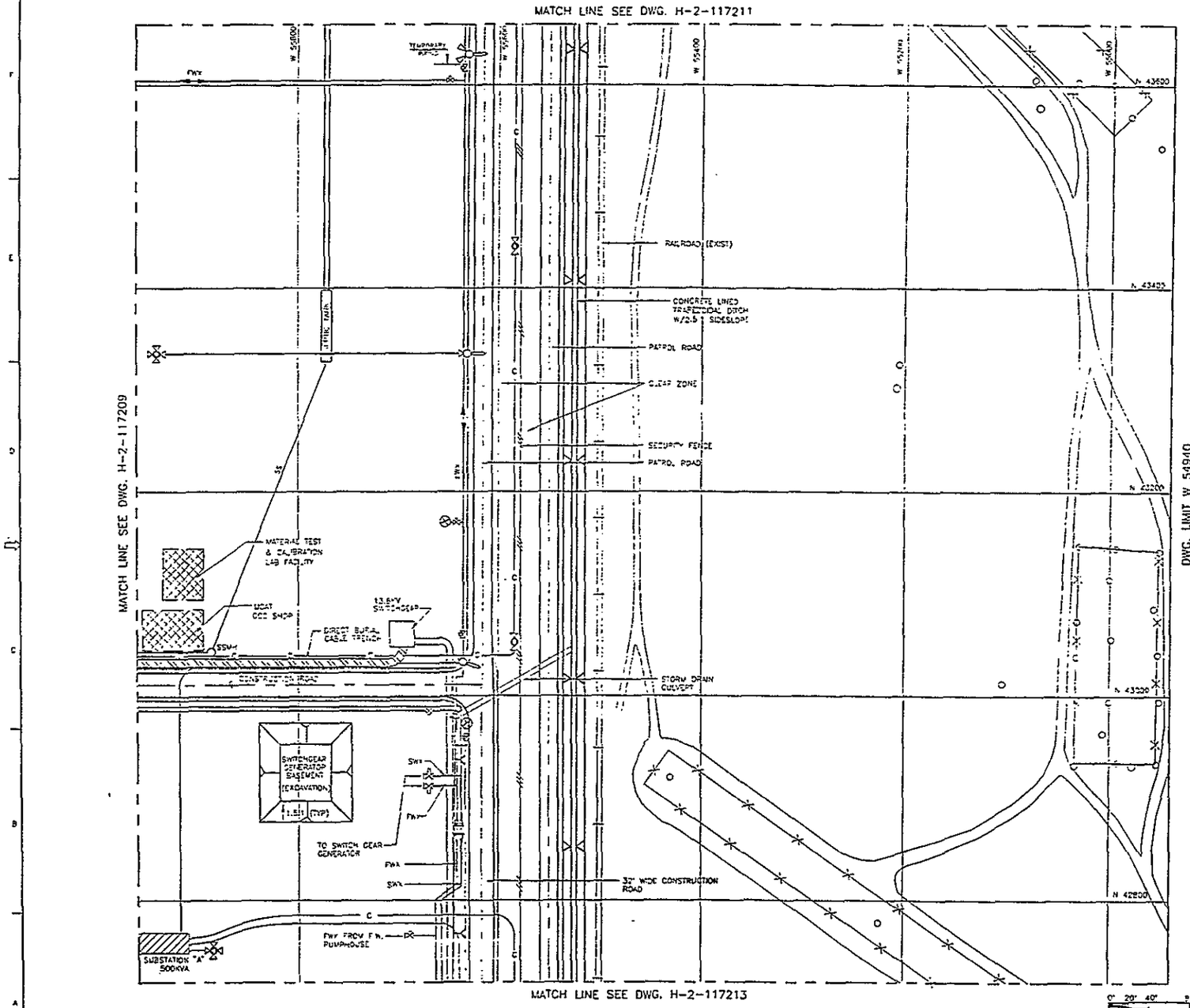
| | | |
|---|---|---|
| DRAWN | J. F. FREDRICKS | 10-25-90 |
| DESIGNED | G. P. CHAUNCY | 10-25-90 |
| ENGINEERING | J. L. BROOKS | 10-25-90 |
| PROJECT ENGINEER | J. J. SMITH | 10-25-90 |
| CONSTRUCTION | J. J. MATOPS | 10-25-90 |
| SAFETY | C. H. HUNDHOFF | 10-25-90 |
| PROJECT MANAGER | R. SOTO | 10-25-90 |
| APPROVED | H. O'NEEFE | 10-25-90 |
| | E. H. CONLEY | 10-25-90 |

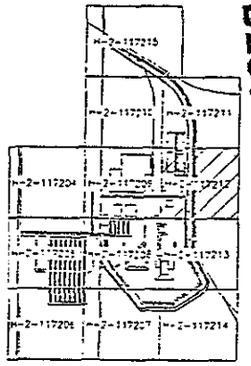
| | | | |
|---|---|---|---|
| SCALE | 1"=40' | | |
| DWG. NO. | B-595 | 845724 | 3102 |
| SHEET NO. | 1 | 1 | 1 |
| REV. | 0 | | |

NONE | NOT REQ'D | H-2-117211

AC117211

9112170703




KEY PLAN

BEST AVAILABLE COPY

NOTES

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| D | | PROVED LEACH FIELD MANHOLE, SEWER LINE, FWV, ELEC. UDCPOS, 13.8KV SWITCHGEAR EQ'L, DIRECT BURIAL CABLE AND REVISED NOTES FOR WWW-0412 AND RELEASED FOR PROJECT BASELINE CONTROL | |
| CC | 9/26/90 | RELEASED FOR DETAIL DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
EPD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RL - RICHLAND, WASHINGTON

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

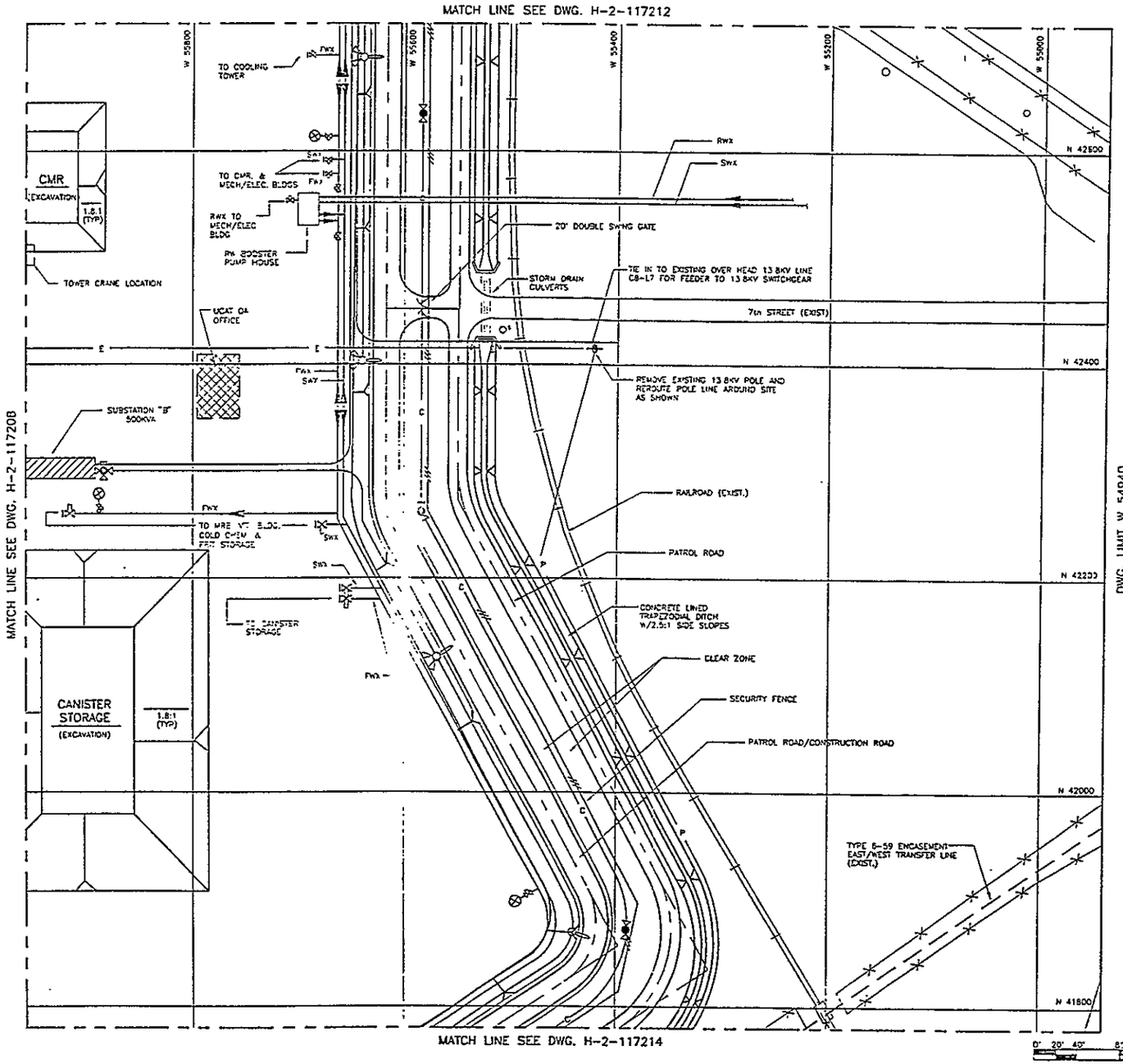
| | |
|---|---|
| R N GIBBONS | 12-3-87 |
| O P OHAWA | 12-3-87 |
| F.C BROOKS | 12-3-87 |
| J L SMETS | 12-3-87 |
| T R JACOBS | 12-3-87 |
| G AULENOFF | 12-3-87 |
| J P SOTO | 12-3-87 |
| M O'KEEFE | 12-3-87 |
| B H CONLEY | 12-3-87 |

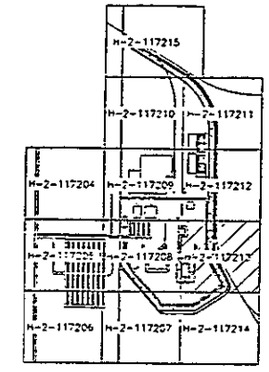
B-595 | 045774 | 3192

1" = 40'

NONE | NOT REQ'D | H-2-117212 | 1 : 1 | 0

8 0 0 7 2 1 1 6




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX.
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | | |
|---|---|---|---|---|---|
| 0 | 10/18/90 | REMOVED HOLES PER CR HWVP-0449 AND RELEASED FOR PROJECT BASELINE CONTROL | | | |
| DO | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | DK | EJ |
| REV NO | DATE | REVISION DESCRIPTION | CDC | FCB | OPC / RHG |

ENGINEERING RELEASE
REV _____ DATE _____
ERO

| | |
|---|---|
| F R N GIBBONS | 15-6-90 |
| O P CHAWLA | 12-5-90 |
| F.C. BROOKS | 13-6-90 |
| J L SMETS | 16-3-90 |
| E. R. JACOBS | 15-3-90 |
| D KUILANOFF | 12-3-90 |
| J F SOTO | 12-3-90 |
| H D KEEFE | 12-3-90 |
| E H. CONLEY | 12-3-90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION

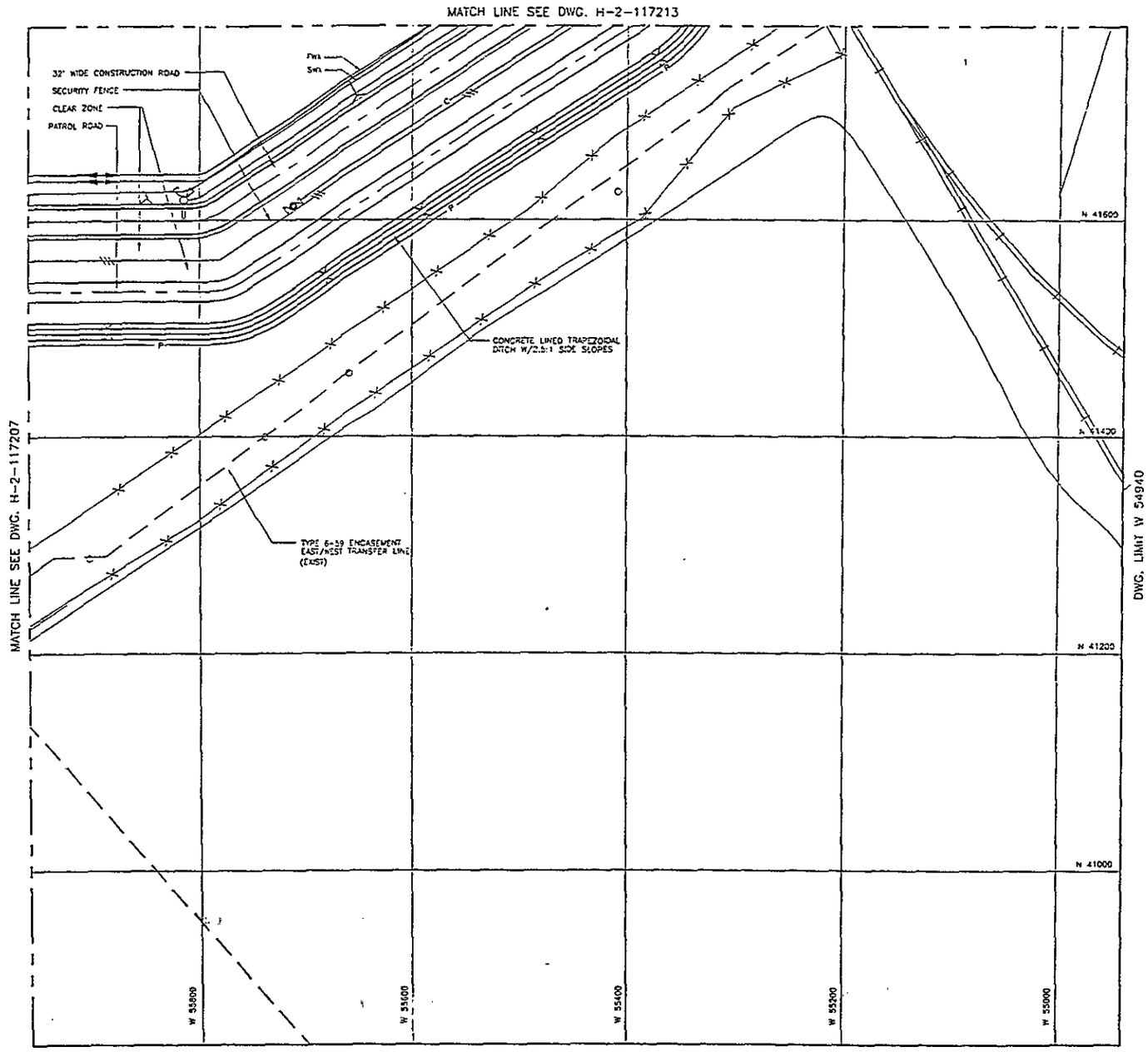
CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

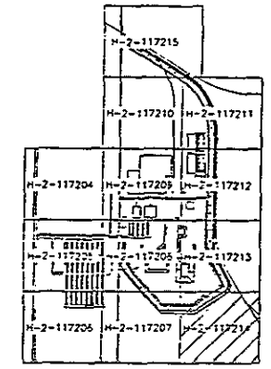
PROJECT TITLE: HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| SCALE | B-595 | PLANT DRAWING NO. 845724 | DATE 3102 |
| DRAWN BY | 1" = 40' | SHEET NO. | |

| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117213 | 1 | 1 | 0 |

9112170396




KEY PLAN

BEST AVAILABLE COPY

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

GRAPHIC SCALE 0' 20' 40' 80' 120'

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR NWVP-0449 | SC DJS GK EJ / DJS FJG GK KO |
| CD | 9/6/90 | RELEASED FOR DETAIL DESIGN | DC DJS GK EJ / CDG FEB OPC RNG |

ENGINEERING RELEASE
REV. _____ DATE _____
ERD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

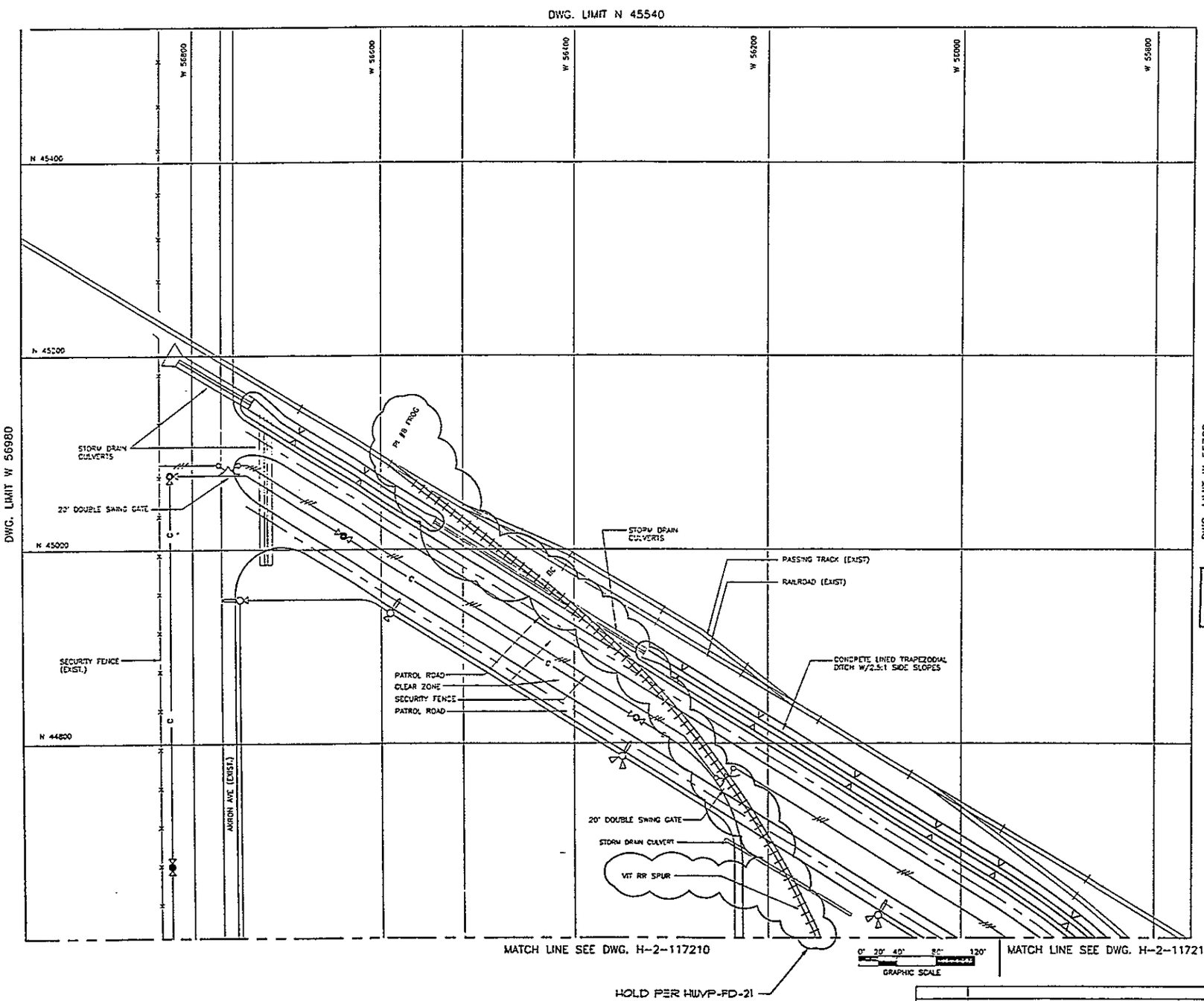
CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

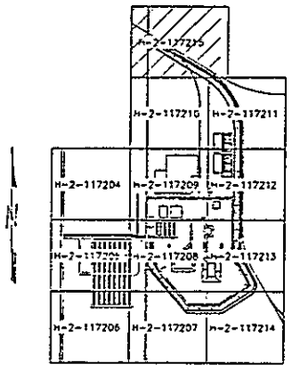
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| DRAWN BY | R.H. GIBBONS | 10-26-90 |
| DESIGNED BY | O.P. CHAWLA | 10-26-90 |
| ENGINEERED BY | F.G. BARROWS | 10-26-90 |
| PROJECT ENGINEER | J.J. SVETS | 10-26-90 |
| PROJECT MANAGER | E.E. JACOBS | 10-26-90 |
| CONSTRUCTION MANAGER | G. KURLANOFF | 10-26-90 |
| PROJECT ENGINEER | J.P. SOTO | 10-26-90 |
| PROJECT MANAGER | H.O'KEEFE | 10-26-90 |
| CONSTRUCTION MANAGER | B.H. CONLEY | 10-26-90 |

| | | | |
|---|---|---|---|
| SCALE | 1"=40' | DWG. NO. | 845724 |
| SHEET NO. | 3102 | | |
| NONE | NOT REQ'D | H-2-117214 | 1 / 1 / 0 |

9112170210




KEY PLAN

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV. | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| G | 10/26/90 | ADD CULVERT UNDER RR. ADD EXISTING PASSING TRACK AND REMOVE HOLDS (EXCEPT RR SPUR) CR HWVP-0449 AND RELEASED FOR PROJ. BASELINE CONTROL | SC DJB 10/26 EJ |
| DD | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC DJB CK EJ |

ENGINEERING RELEASE
REV. ____ DATE ____
EPO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RL = ACRO-RWL/RDJB

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SITE LAYOUT AND UTILITIES PLAN

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| R.N. GIBBONS | 10-5-90 | |
| G.P. CHAWLA | 10-5-90 | |
| J. SHUCKS | 10-5-90 | |
| J.L. SUSTS | 10-5-90 | |
| R.R. JACOBS | 10-5-90 | |
| J. SHULANOFF | 10-5-90 | |
| F. SOTO | 10-5-90 | |
| J. SHEETS | 10-5-90 | |
| J.M. CONLEY | 10-5-90 | |

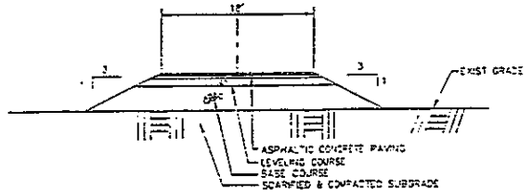
| | | |
|---|---|---|
| DWG. NO. | 8-595 | 845724 |
| SCALE | 1" = 40' | |

| | | | |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-117215 | 1 | 1 | 0 |

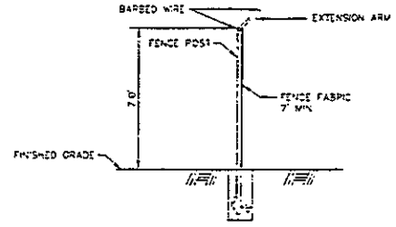
BEST AVAILABLE COPY

9112170091

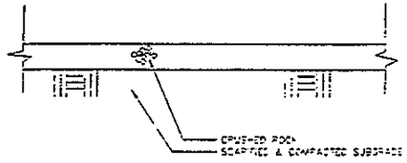
BEST AVAILABLE COPY



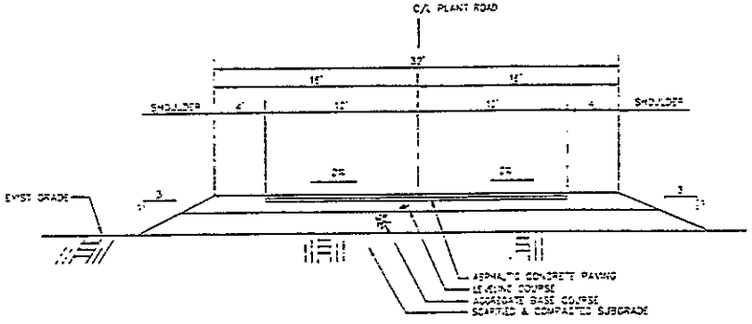

TYPICAL PATROL ROAD SECTION
NOT TO SCALE



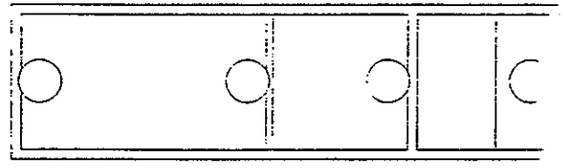

CHAIN LINK SECURITY FENCE DETAIL
NOT TO SCALE



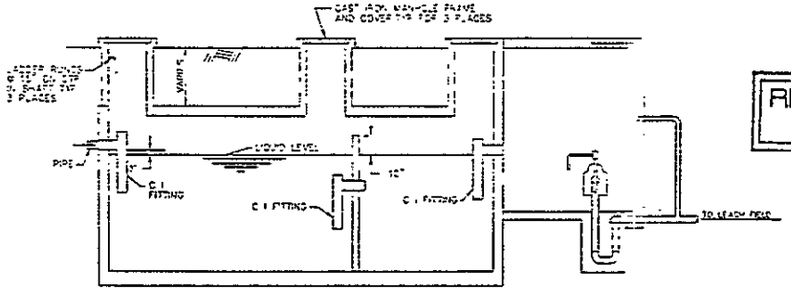

TYPICAL CRUSHED ROCK SURFACING DETAIL
NOT TO SCALE




TYPICAL PLANT CONSTRUCTION ROAD SECTION
NOT TO SCALE

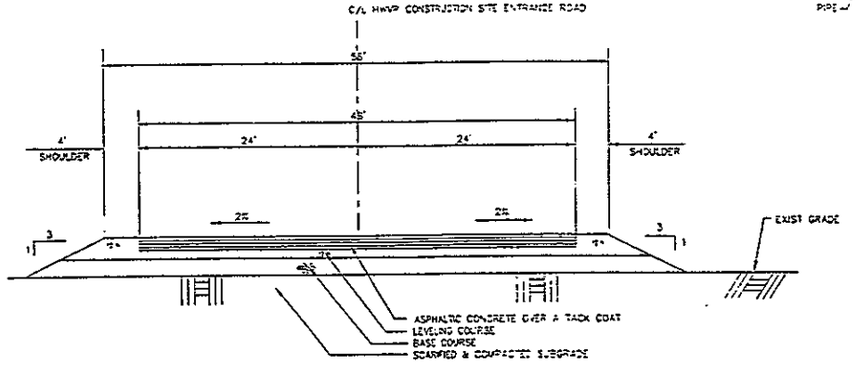


PLAN




SECTION

SEPTIC TANK AND DOSING TANK
NOT TO SCALE




HWVP CONSTRUCTION SITE ENTRANCE ROAD
NOT TO SCALE

NOTES:

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWINGS INDEX
2. SEE DRAWING NUMBER H-2-117202 FOR ABBREVIATIONS LEGEND AND GENERAL NOTES

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY | CHK | APPR |
|---|---|---|---|---|---|
| 0 | 10/25/90 | DELETED LIFT STATION & ADDED DOSING TANK AND RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | | | |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | BC | | |

ENGINEERING RELEASE
REV ____ DATE ____
ERD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SECTIONS AND DETAILS

HANFORD WASTE VITRIFICATION PLANT

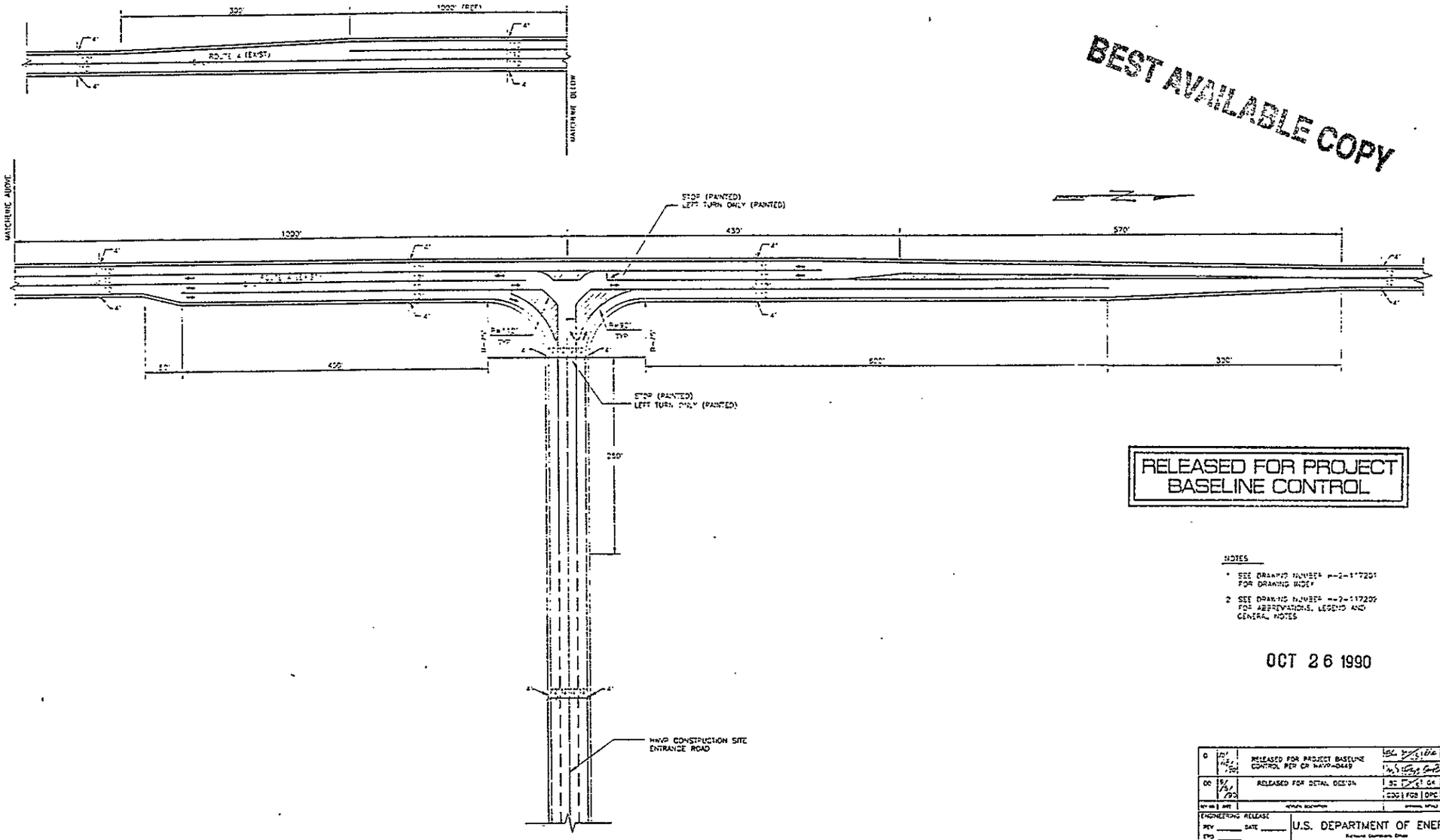
| | |
|---|---|
| DRAWN BY | J H GIBBONS |
| DESIGNED BY | D P CHAWLA |
| CHECKED BY | T C BROOKS |
| | J L SMETS |
| | D R JACOBS |
| | G KUBLANOFF |
| | J R SOTO |
| | P G KEEFE |
| | B H CORLEY |

| | |
|---|---|
| FLUOR DANIEL NO. | B-595 |
| FLUOR DANIEL NO. | 845724 |
| SCALE | NONE |
| DWG NO. | H-2-117220 |
| SHEET NO. | 1 |
| REV | 0 |

NONE | NOT REQ'D

AA817220

9 1 1 2 1 7 / 0 9 2




MODIFICATION TO STATE HIGHWAY ROUTE 4 (1)

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RELEASED FOR PROJECT BASELINE CONTROL

NOTES

1. SEE DRAWING NUMBER H-2-117201 FOR DRAWING INDEX
2. SEE DRAWING NUMBER H-2-117209 FOR ABBREVIATIONS, LEGEND AND GENERAL NOTES

OCT 26 1990

| REV | DATE | DESCRIPTION | APPROVAL DETAILS |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0449 | |
| 00 | 9/5/90 | RELEASED FOR DETAIL DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION

CONSTRUCTION SUPPORT FACILITIES
SECTIONS AND DETAILS

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| R.A.GIBBONS | 10-5-90 | |
| D.P.CHAWLA | 10-5-90 | |
| F.J.BROOKS | 10-5-90 | |
| J.J.SWETS | 10-5-90 | |
| E.R.JACOBS | 10-5-90 | |
| W.A.KULANOFF | 10-5-90 | |
| J.R.SOTO | 10-5-90 | |
| M.D.KEEFE | 10-5-90 | B-531 |
| S.H.CONLEY | 10-5-90 | 1"=50' |

FLUOR DANIEL CODE 34577-X — 3102

NONE | NOT REQ'D | H-2-117221 | 1 | 1 | 0

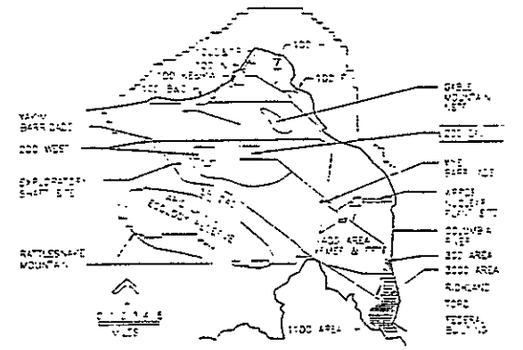
AC117221

PROJECT TITLE:
# B-595 HWVP-HANFORD WASTE VITRIFICATION PLANT

FOR:
## U.S. DEPARTMENT OF ENERGY RICHLAND OPERATIONS OFFICE

BY:
## FLUOR DANIEL, INC.

## PRELIMINARY DESIGN GENERAL ARRANGEMENT DRAWINGS




HANFORD AREA MAP

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | | |
|---|---|---|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL | | | | |
| | PER CR NO. HWVP-0442 | | | | |
| 00 | RELEASED FOR DETAILED DESIGN | BHC | | RPK | ERJ |
| | | JLS | FCB | OPC | RNG |

ENGINEERING RELEASE
REV. ____ DATE ____
ECO ____

| | | |
|---|---|---|
| R. GIBBONS | 8/20/93 | |
| O. CHAWLA | 8/20/93 | |
| C. BROOKS | 8/20/93 | |
| J. SVETS | 8/17/93 | |
| E. JACOBS | 8/15/93 | |
| R. KUMAR | 8/14/93 | |
| J. REA | 8/14/93 | |
| J. GOODE | 8/14/93 | |
| B. CONLEY | 8/16/93 | |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - ACDR-0000 MBLM

FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
DRAWINGS
TITLE SHEET

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3108 | |
| NONE | ALL | | |
| NONE | NOT REQ'D | H-2-117000 | 1 1 0 |

AUTOCAD

D0217000
13 OCT 90
LDD = DWG

9112170094

## ABBREVIATION INDEX

| | |
|---|---|
| AC | AIR CONDITIONING |
| AHU | AIR HANDLING UNIT |
| ANAL | ANALYZER |
| APPROX | APPROXIMATELY |
| BLDG | BUILDING |
| BO | BOTTOM OF |
| BOS | BOTTOM OF STEEL |
| BOT | BOTTOM |
| CAEM | CONTINUOUS AIRBORNE EFFLUENT MONITOR |
| CB | CATCH BASIN |
| CCTV | CLOSED CIRCUIT TELEVISION |
| C TO C | CENTER TO CENTER |
| CHKD PL | CHECKERED PLATE |
| CLR | CLEARANCE |
| CONC | CONCRETE |
| CONT | CONTAMINATION |
| DECON | DECONTAMINATION |
| DIA | DIAMETER |
| DN | DOWN |
| DWG | DRAWING |
| EA | EACH |
| EL | ELEVATION |
| ELECT | ELECTRICAL |
| EMER | EMERGENCY |
| EQ | EQUAL OR EQUALLY |
| EQUIP | EQUIPMENT |
| EXIST | EXISTING |
| EXP JT | EXPANSION JOINT |
| FDN | FOUNDATION |
| FLT | FILTER |
| FLR | FLOOR |
| FOS | FIELD OPERATIONS STATION |
| FTG | FOOTING |
| GEN | GENERATOR |
| GRTG | GRATING |
| HORIZ | HORIZONTAL |
| HPFS | HIGH POINT FINISH SURFACE |
| HP | HIGH POINT |
| HR | HANDRAIL |
| HVAC | HEATING VENTILATING AND AIR CONDITIONING |
| INSTR | INSTRUMENT |
| LAB | LABORATORY |
| LOC | LOCATION |
| LP | LOW POINT |
| LVL | LEVEL |
| MAINT | MAINTENANCE |
| MAX | MAXIMUM |
| MCC | MOTOR CONTROL CENTER |
| MEZZ | MEZZANINE |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MPH | MILES PER HOUR |
| MSM | MASTER SLAVE MANIPULATOR |
| NO | NUMBER |
| NOX | NITROGEN OXIDE |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OPNG | OPENING |
| ORP | ORPHITE |
| PL | PLATE |
| PLATF | PLATFORM |
| PLCS | PLACES |
| PLEN | PLENUM |
| PREFILT | PREFILTER |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| REF | REFERENCE |
| REG | REGULATOR |
| REQD | REQUIRED |
| RM | ROOM |
| SCT | SHIELDED CANISTER TRANSPORTER |
| SH | SHEET |
| SIM | SIMILAR |
| SOP | STEP-OFF PAD |
| SQ | SQUARE |
| SS | STAINLESS STEEL |
| STD | STANDARD |
| STL | STEEL |
| SUSP CLG | SUSPENDED CEILING |
| SYM | SYMMETRICAL |
| THK | THICK |
| TK | TANK |
| TRANS | TRANSFER |
| TBD | TO BE DETERMINED |
| TS | TOP OF |
| TOC | TOP OF CONCRETE |
| TOS | TOP OF STEEL |
| TYP | TYPICAL |
| UNLS | UNLESS NOTED OTHERWISE |
| VB | VALVE BOX |
| VERT | VERTICAL |
| VEST | VESTIBULE |
| VIT | VITRIFICATION |
| W/ | WITH |
| WHT | WASTE HOLD TANK |
| WTC | WELD TEST CELL |
| Δ | AVE |
| @ | AT |
| ø | DIAMETER |
| ℄ | CENTERLINE |

## LEGEND

- STEEL GRATING
- CONCRETE
- SUPPORTING SOIL OR GRADE
- OPENING
- HANDRAIL (ELEVATION)
- CHECKERED PLATE
- OBJECT OR DIMENSION LINE
- MATCH LINE
- HIDDEN LINE
- DIRECTION OF FLOOR OR ROOF SLOPE
- GYPSUM BOARD WALL
- REFERENCE LINE
- EXTERIOR SIDING
- CENTERLINE
- MISSILE PROTECTION WALL

## GENERAL DESIGN CRITERIA

1. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4,000 PSI
2. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60
3. STRUCTURAL STEEL SHALL BE ASTM A36 (CARBON STEEL) OR ASTM A276 & 240 TYPE 304L (STAINLESS STEEL)
4. MINIMUM LIVE LOADS ARE
   - 200 PSF FOR OPERATING PLATFORMS
   - 200 PSF FOR OPERATING AND EQUIPMENT ROOMS
   - 100 PSF FOR CORRIDORS AND STAIRS
   - 50 PSF FOR OFFICES
   - ALSO SEE NOTE 13
5. SNOW LIVE LOAD IS 30 PSF
6. VOLCANIC ASHFALL LOAD IS 20 PSF
7. NORMAL DESIGN WIND (W NOT) BASIC WIND SPEED OF 70 MPH FOR SAFETY CLASS 3 AND 4 STRUCTURES
8. DESIGN BASIS WIND (DBW) WAS A MAXIMUM HORIZONTAL WIND SPEED OF 90 MPH FOR SAFETY CLASS 1 AND 2 AND 110 MPH FOR SAFETY CLASS 3 STRUCTURES
9. NET ALLOWABLE SOIL BEARING PRESSURE IS 4,000 PSF MAXIMUM (SEE NOTE 13)
10. UNIFORM BUILDING CODE (1988), SEISMIC ZONE IS 2B FOR SAFETY CLASS 3 AND 4 STRUCTURES
11. MAGNITUDE OF MAXIMUM FREE FIELD HORIZONTAL GROUND ACCELERATION FOR DESIGN BASIS EARTHQUAKE (DBE) IS 0.2g FOR SAFETY CLASS 1 STRUCTURES AND 0.12g FOR SAFETY CLASS 2 STRUCTURES
12. MAGNITUDE OF FREE FIELD MAXIMUM VERTICAL GROUND ACCELERATION IS 2/3 OF HORIZONTAL ACCELERATION FOR DBE
13. ADDITIONAL DESIGN CRITERIA IS SPECIFIED IN THE HWVP PROJECT DESIGN GUIDE (PDG) SECTION 10

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | DRWN | CHKD | APPROVAL |
|---|---|---|---|---|---|
| 0 | 10/26/90 | REV'D ABBREVIATION BOXES AND RELEASED FOR PROJECT BASELINE CONTROL PER DCN NO. 8000-0442 | | | |
| 00 | 8/20/90 | RELEASED FOR DETAILED DESIGN | TJH | RPK | ERJ |
| | | | JLS | FGB | DPC |

ENGINEERING RELEASE
REV. ____ DATE ____
CO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL10836

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
GENERAL NOTES & LEGEND

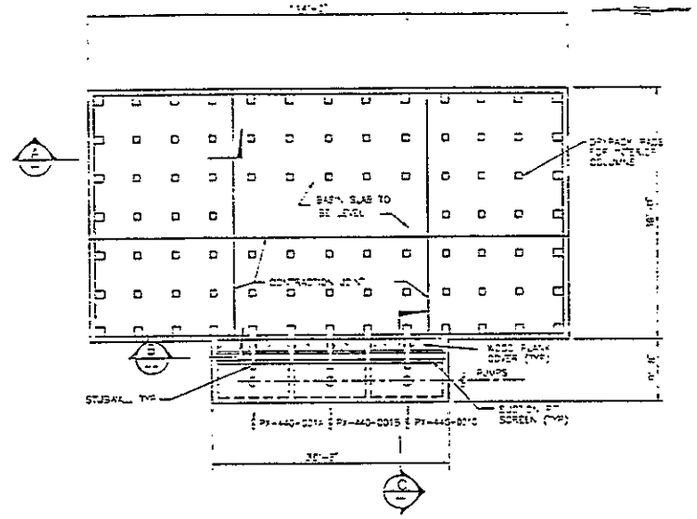
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| R GIBBONS | 10/22/90 | | |
| O CHAWLA | 10/22/90 | | |
| F BROOKS | 10/22/90 | | |
| J SMETS | 10/17/90 | | |
| E JACOBS | 10/17/90 | | |
| R KUMAR | 10/17/90 | | |
| P GRANT | 10/17/90 | | |
| J REA | 10/17/90 | 8-595 | 845724 | 310B |
| Y HORVATH | 10/17/90 | NONE | ALL |

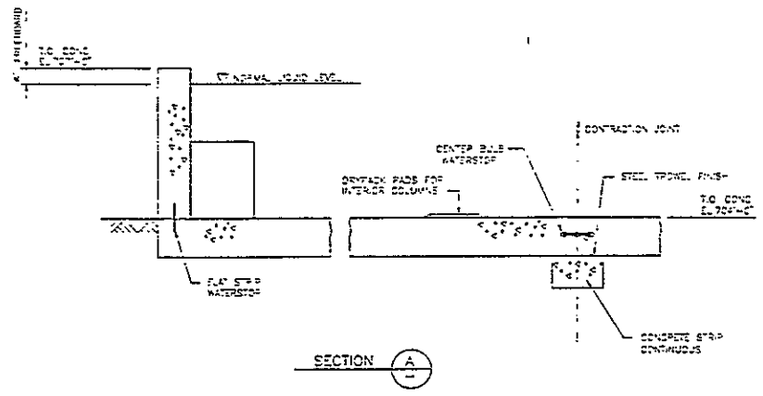
| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117001 | 1 | 1 | 0 |

AUTOCAD 1 E2217001 13 OCT 90 LCO - V.K.

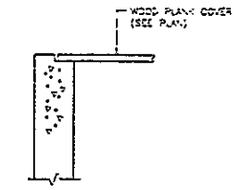
9112170705



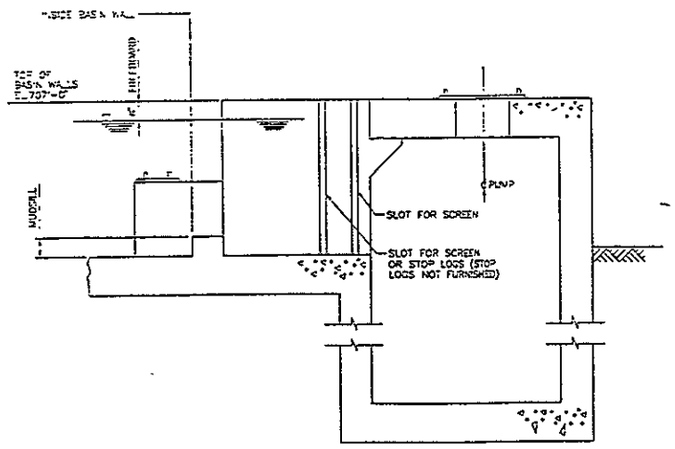

COOLING TOWER FOUNDATION PLAN



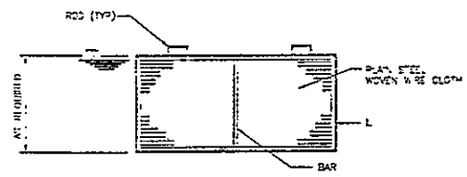

SECTION A




SECTION B




SECTION C




SUCTION PIT SCREEN
(GALVANIZE AFTER ASSEMBLY)

ELEVATION

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NOTE:

1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001

| REV | | | |
|---|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL | | |
| | PCT CR NO. 90NYP-0442 | | |
| 00 | RELEASED FOR DETAILED DESIGN | | |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

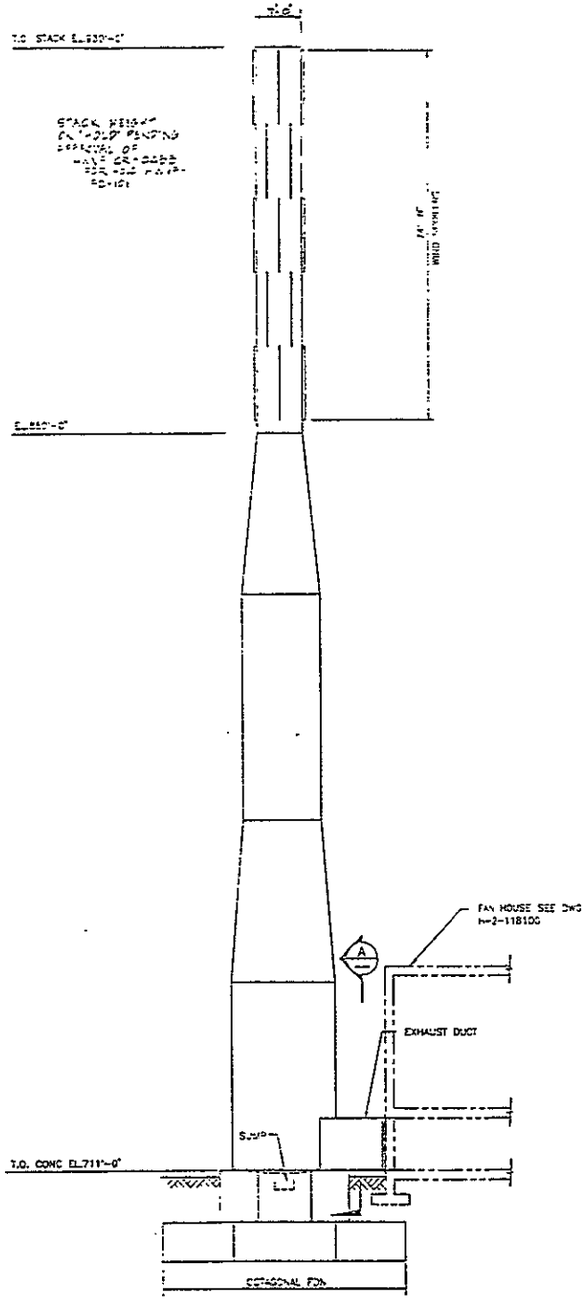
GENERAL ARRANGEMENT
COOLING TOWER FOUNDATION
PLANS AND DETAILS

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 2-341 | E-595 | 845724 | 3107 |
| 1-0-90 | NONE | 11 | |
| NONE | NOT REQ'D | H-2-117020 | 1 1 1 C |

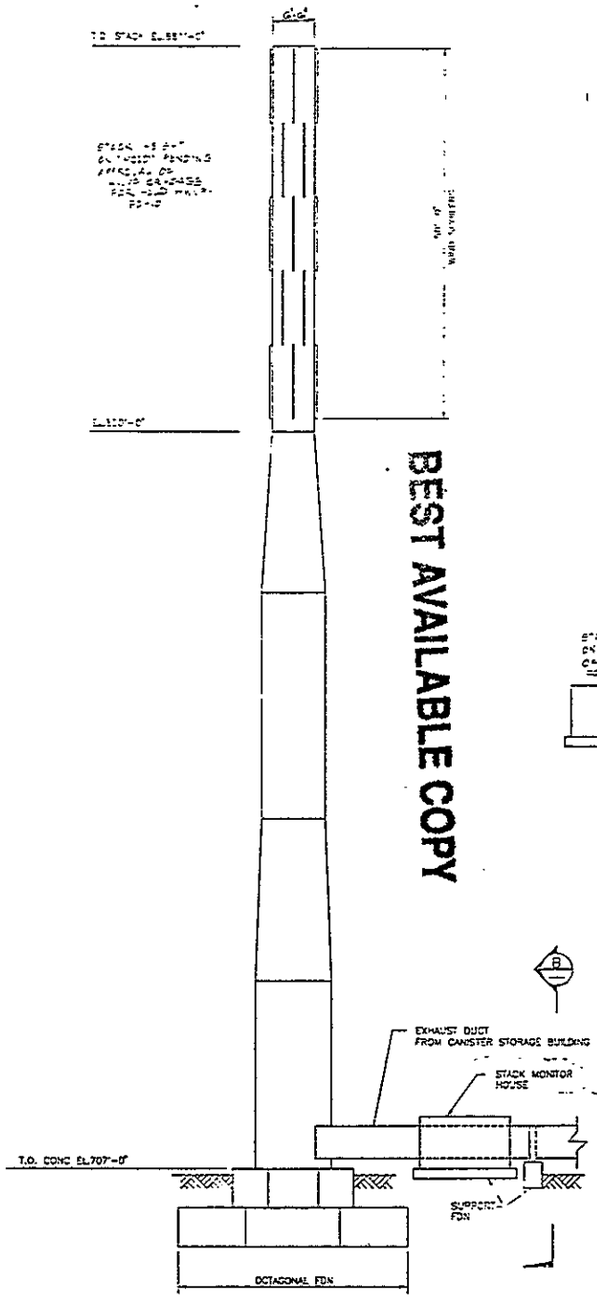
AUTOCAD 1 G2217020 10 AUG 90 LCO = CEF

9 1 1 2 1 5 7 0 2 0 6



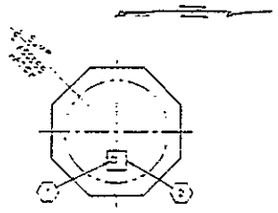

EAST ELEVATION

FAN HOUSE (HVAC ZONE 1) EXHAUST STACK AND FOUNDATION

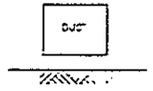



EAST ELEVATION

CANISTER STORAGE BUILDING EXHAUST STACK AND FOUNDATION

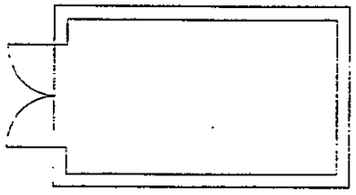


PIPE PLAN @ FAN HOUSE EXHAUST STACK FOUNDATION




SECTION A

SECTION B



FLOOR PLAN
CANISTER STORAGE BUILDING
STACK MONITOR HOUSE
SCALE 1/4" = 1'-0"

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NOTE:

1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.
2. STACK EFFLUENT MONITOR PROBES, WASHDOWN SYSTEM, AND ACCESS PLATFORMS AND LADDERS REQUIRED WILL BE PROVIDED IN DETAILED DESIGN.

| EQUIPMENT NO. | EQUIPMENT NUMBER | DESCRIPTION |
|---|---|---|
| 1 | [illegible] | EXHAUST STACK SUMP PUMP |
| 2 | [illegible] | EXHAUST STACK SUMP |

| REV NO | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| C | [illegible] | [illegible] | [illegible] |
| CC | [illegible] | RELEASED FOR DETAILED DESIGN | [illegible] |

ENGINEERING RELEASE
REV ____ DATE ____
ERD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
HVAC STACKS AND DUCTS

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| E-595 | E65724 | 3107 | |
| NONE | 10 | | |

| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-117025 | 1 | 0 |

AUTOCAD 1 D0217025 22 AUG 90 LDD = 027

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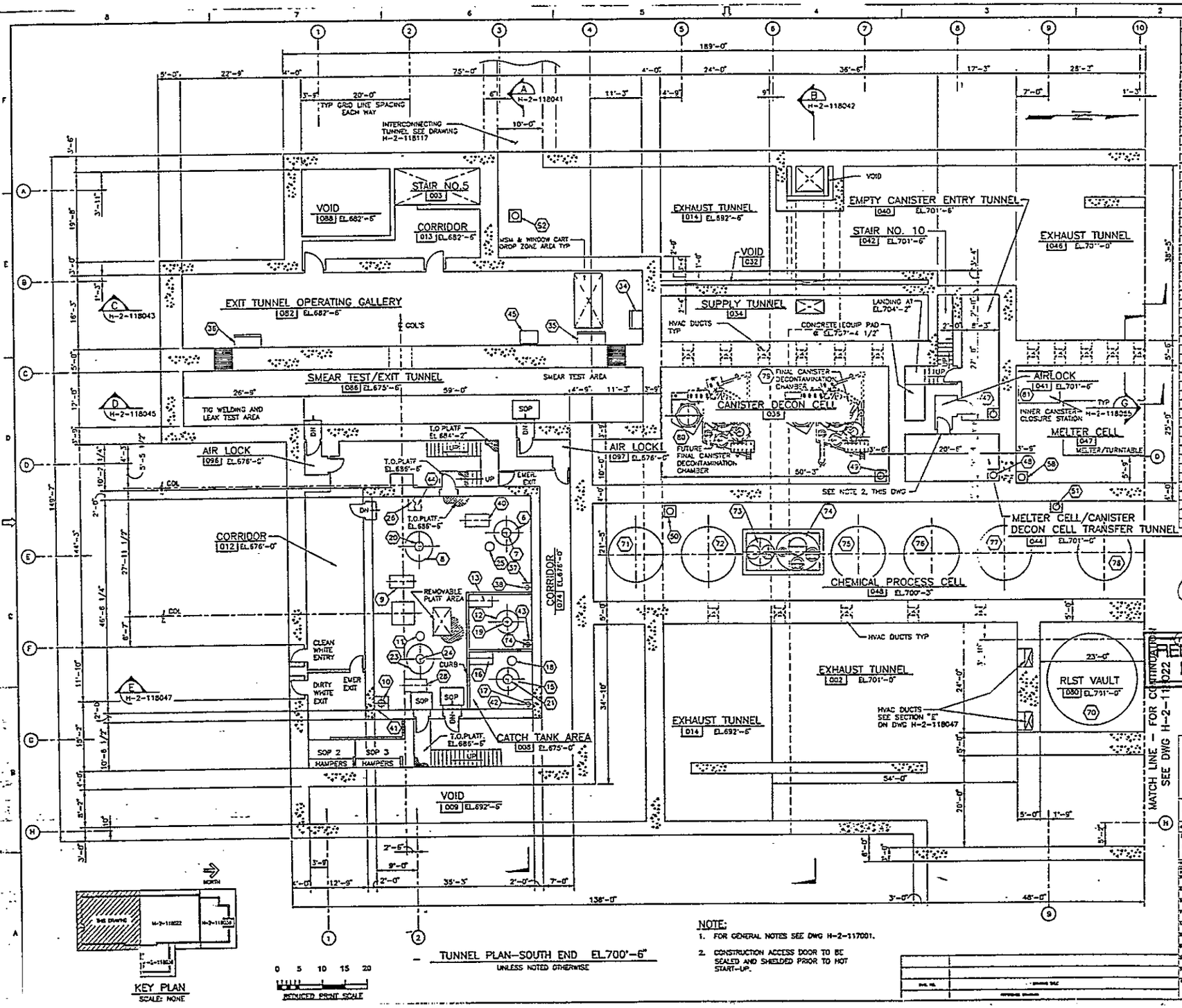


NOTE:
1. FOR GENERAL NOTES SEE DWG H-2-117001.
2. CONSTRUCTION ACCESS DOOR TO BE SEALED AND SHIELDED PRIOR TO HOT START-UP.

EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | MODEL | DESCRIPTION |
|---|---|---|---|
| 6 | TK-520-002 | 8'-0" | REGULATED DRAINS CATCH TANK |
| 7 | AG-520-005 | 1'-0" | REGULATED DRAINS CATCH TANK AGITATOR |
| 8 | TK-520-007 | 1'-0" | FLOOR DRAIN CATCH TANK |
| 9 | PX-520-001 | 1'-0" | FLOOR DRAIN CATCH TANK TRANSFER PUMP |
| 10 | PX-520-002 | 1'-0" | FLOOR DRAIN CATCH TANK SUMP PUMP |
| 11 | FH-520-007 | 1'-0" | FLOOR DRAIN CATCH TANK HEPA FILTER |
| 12 | TK-520-002 | 8'-0" | ACID DRAIN CATCH TANK |
| 13 | PX-520-004 | 2'-0" | ACID DRAIN CATCH TANK TRANSFER PUMP |
| 14 | PX-520-005 | 1'-0" | ACID DRAIN CATCH TANK SUMP PUMP |
| 15 | TK-520-004 | 8'-0" | ORGANIC ACID DRAIN CATCH TANK |
| 16 | PX-520-006 | 2'-0" | ORGANIC ACID DRAIN CATCH TANK TRANSFER PUMP |
| 17 | PX-520-007 | 1'-0" | ORGANIC ACID DRAIN CATCH TANK SUMP PUMP |
| 18 | FH-520-003 | 1'-0" | ORGANIC ACID DRAIN CATCH TANK HEPA FILTER |
| 19 | AG-520-002 | 1'-0" | ACID DRAIN CATCH TANK AGITATOR |
| 20 | AG-520-007 | 1'-0" | FLOOR DRAIN CATCH TANK AGITATOR |
| 21 | AG-520-003 | 1'-0" | ORGANIC ACID DRAIN CATCH TANK AGITATOR |
| 23 | TK-520-005 | 1'-0" | FLOOR DRAIN SAMPLING TANK |
| 24 | AG-520-004 | 1'-0" | FLOOR DRAIN SAMPLING TANK AGITATOR |
| 25 | FH-520-002 | 1'-0" | REGULATED DRAINS CATCH TANK HEPA FILTER |
| 26 | | 1'-0" | SAFETY SHOWER |
| 29 | PX-520-008 | 2'-0" | FLOOR DRAIN SAMPLING TANK TRANSFER PUMP |
| 34 | LP-230-001 | 2'-0" | CCC SMEAR TEST STATION TURNTABLE LOCAL PANEL |
| 35 | LP-230-002 | 2'-0" | CCC STS PNEUMATIC TRANSFER SYSTEM LOCAL PANEL |
| 36 | LP-230-007 | 2'-0" | EXIT TUNNEL TURNTABLE LOCAL PANEL |
| 37 | SU-520-003 | — | REGULATED DRAINS CATCH TANK SUMP |
| 38 | PX-520-005 | 1'-0" | REGULATED DRAINS CATCH TANK SUMP PUMP |
| 40 | PX-520-003 | 2'-0" | REGULATED DRAINS CATCH TANK TRANSFER PUMP |
| 41 | SU-520-033 | — | FLOOR DRAIN CATCH TANK SUMP |
| 42 | SU-520-002 | — | ORGANIC ACID DRAIN CATCH TANK SUMP |
| 43 | SU-520-001 | — | ACID DRAIN CATCH TANK SUMP |
| 44 | | 1'-6" | SAFETY SHOWER |
| 45 | LH-230-001 | 2'-0" | SMEAR HOOD |
| 46 | SU-200-014 | — | CANISTER EXIT TUNNEL SUMP |
| 47 | SU-200-013 | — | ENTRY TUNNEL SUMP |
| 48 | SU-200-013 | — | MELTER CELL/CANISTER DECON CELL TRANS TUNNEL SUMP |
| 49 | SU-200-006 | — | CANISTER DECON CELL SUMP |
| 50 | SU-200-003 | — | CHEMICAL PROCESS CELL SUMP NO.2 |
| 51 | SU-200-003 | — | CHEMICAL PROCESS CELL SUMP NO.3 |
| 52 | SU-200-002 | — | EXHAUST TUNNEL SUMP |
| 56 | SU-200-004 | — | MELTER CELL SUMP NO.1 |
| 72 | TK-114-001A | 10'-6" | RECEIPT AND LAB STORAGE TANK |
| 71 | TK-204-002A | 10'-6" | WASTE ADJUSTMENT TANK (WAT A) |
| 72 | TK-204-001 | 10'-6" | DECONTAMINATION WASTE TREATMENT TANK (DWTT) |
| 73 | TK-204-006 | 8'-10" | PRECOAT FEED TANK (PFT) |
| 74 | TK-204-005 | 10'-6" | FILTER FEED TANK (FFT) |
| 75 | TK-200-003 | 10'-6" | RECYCLE WASTE COLLECTION TANK (RWCT) |
| 76 | TK-208-007 | 10'-6" | WASTE ADJUSTMENT TANK (WAT B) |
| 77 | TK-120-001 | 10'-6" | SLURRY RECEIPT AND ADJUSTMENT TANK (SRAT) |
| 78 | TK-200-004 | 10'-6" | SLURRY MIX EVAPORATION CONDENSATE TANK (SMCDT) |
| 79 | DC-164-001 | — | FINAL CANISTER DECONTAMINATION CHAMBER |
| 80 | DC-168-002 | — | FUTURE FINAL CANISTER DECONTAMINATION CHAMBER |
| 81 | CS-170-004 | — | INNER CANISTER CLOSURE/ISVM SURVEY STATION |

THE FOLLOWING "TWO" NOTES APPLY TO ALL VITRIFICATION BUILDING G.A. DRAWINGS (H-2-118021 THRU H-2-118057 INCLUSIVE)
1) WWVP-FD-104 CR-416 SLAB/BEAM CONSTRUCTION
2) WWVP-FD-105 CR-452 SINGLE POUR WALL CONSTRUCTION

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV NO. | DATE | REVISION DESCRIPTION | DRAWN | CHECKED | APPROVED | APPROVED |
|---|---|---|---|---|---|---|
| 0 | 10/25/90 | REVISED SHEET 53 TO ALIGN WITH CONCRETE EQUIP PAD FLOOR REVISED EAST WALL THKS @ RM 047 AND RM 034 REVISED EAST WALL THKS @ RM 044 & CONTOURS HVAC DUCTS IN THE WALLS TYP. REVISED EQUIP LOC IN RM. 009 & HVAC DUCT & DUCT CALLOUT IN RM. 002 FROM H-2-118021 TO H-2-118047. REVISED EQUIP LIST, ITEMS 46 THRU 52 & 56. DELETE DUCT DWG IN SLAB ABOVE FROM RM. 014. RELEASED FOR PROJECT BASELINE CONTROL. PER CP NO. WHB-0950 | JJS | DW | | |
| 00 | 8/24/90 | RELEASED FOR DETAILED DESIGN | TJH | RPK | RMK | |
| | | | JLS | FGB | CPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____
ENG. ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
TUNNEL PLAN-SOUTH END

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| R GIBBONS | 9/3/90 | | |
| O CHAWLA | 9/3/90 | | |
| F BROOKS | 9/3/90 | | |
| J SMETS | 9/4/90 | | |
| R KEENAN | 9/4/90 | | |
| R KUMAR | 9/25/90 | | |
| C KUILANOFF | 9/25/90 | | |
| J GOODE | 9/25/90 | B-595 | 845724 |
| T HORVATH | 9/21/90 | 1/8"=1'-0" | 1 |

3104

NONE | NOT REQ'D | H-2-118021 | 1 | 1 | 0

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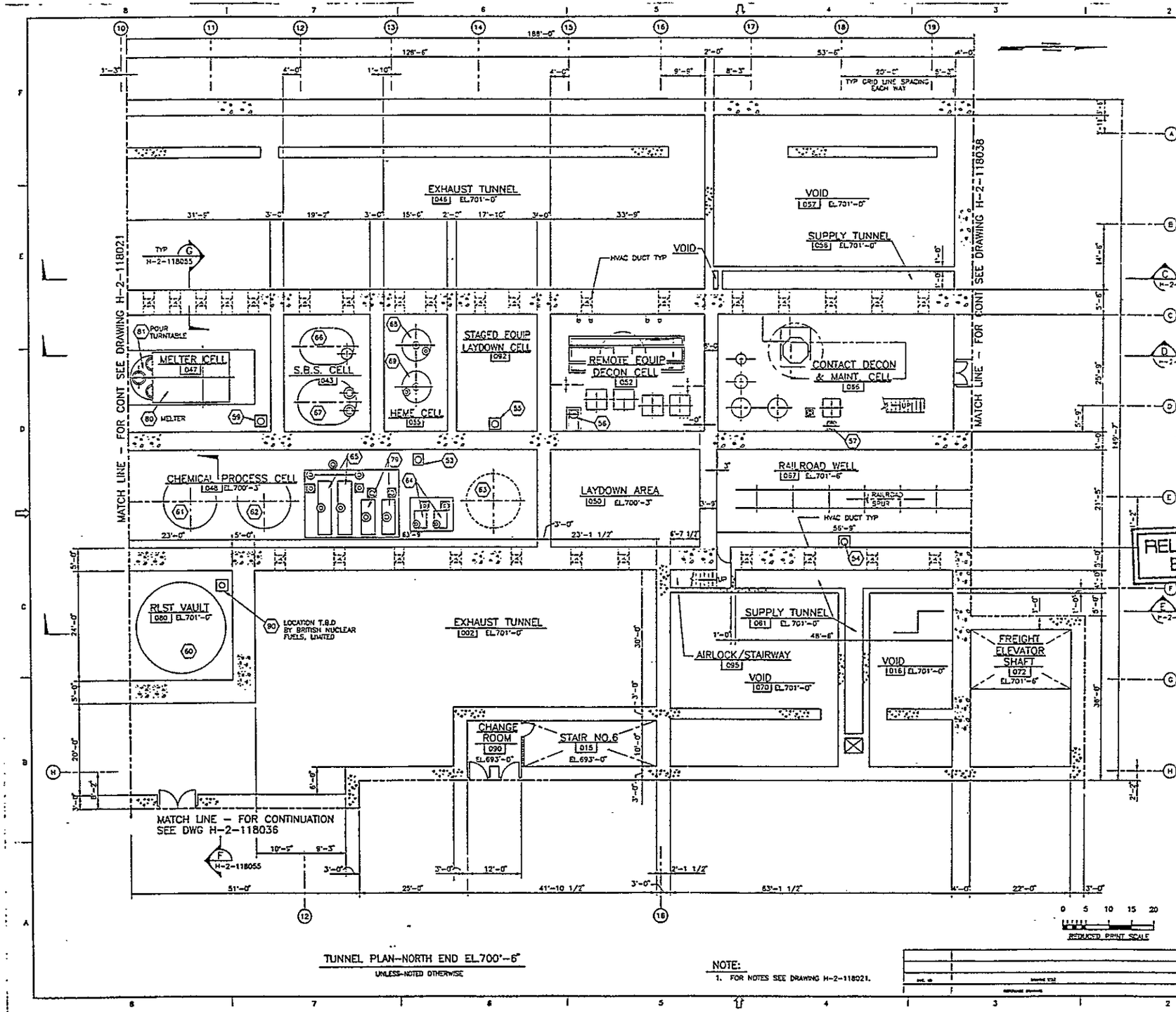


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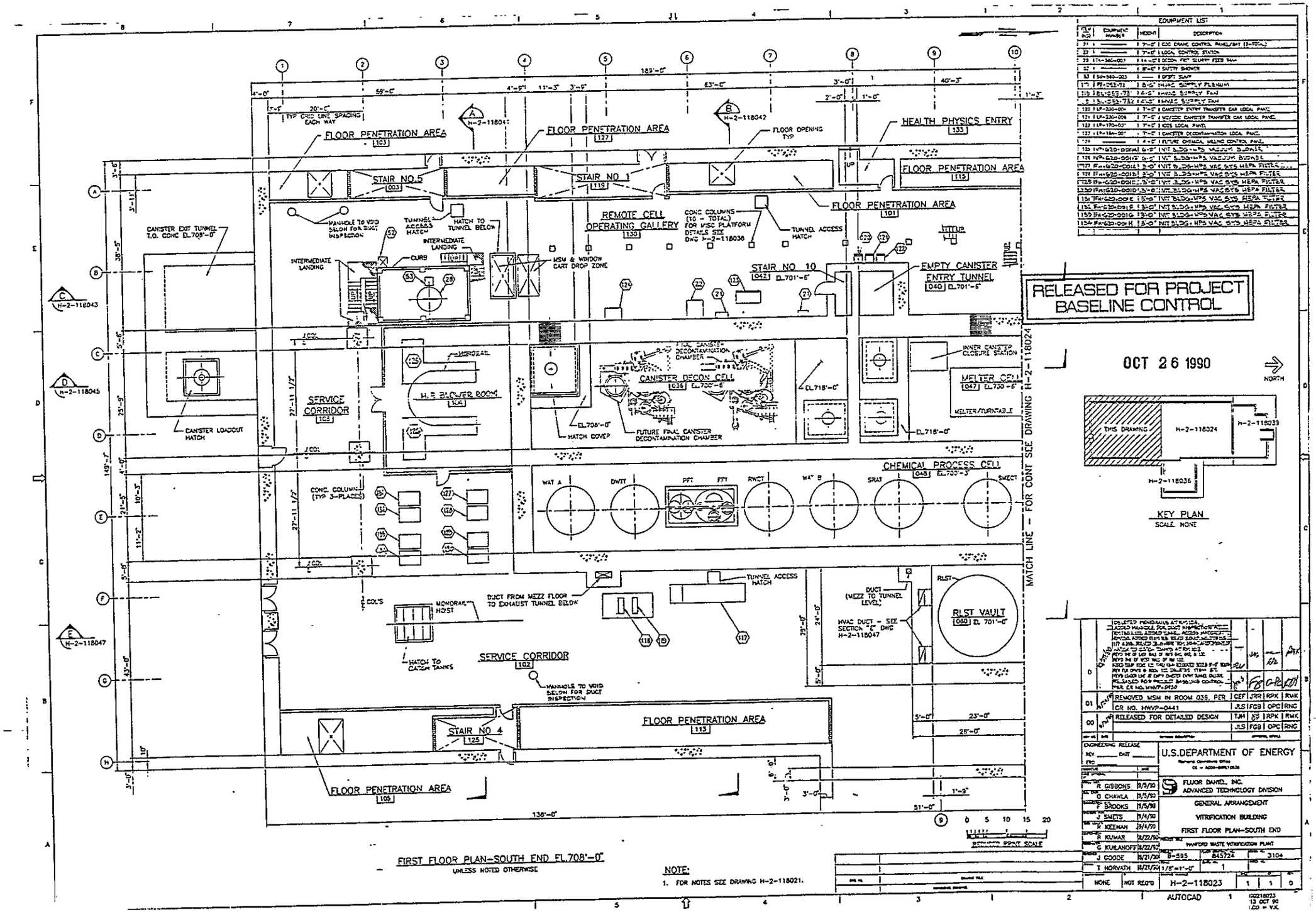

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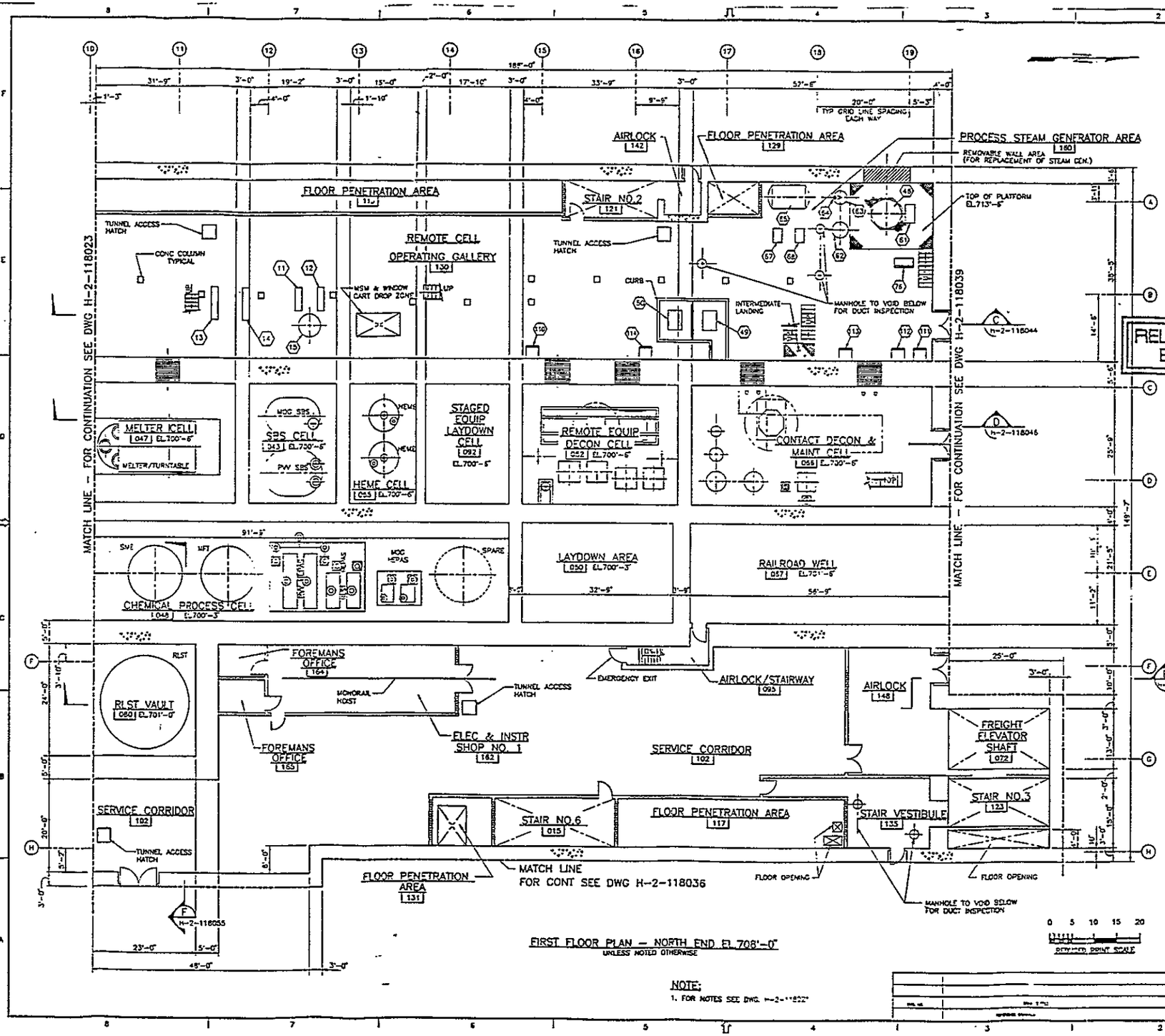

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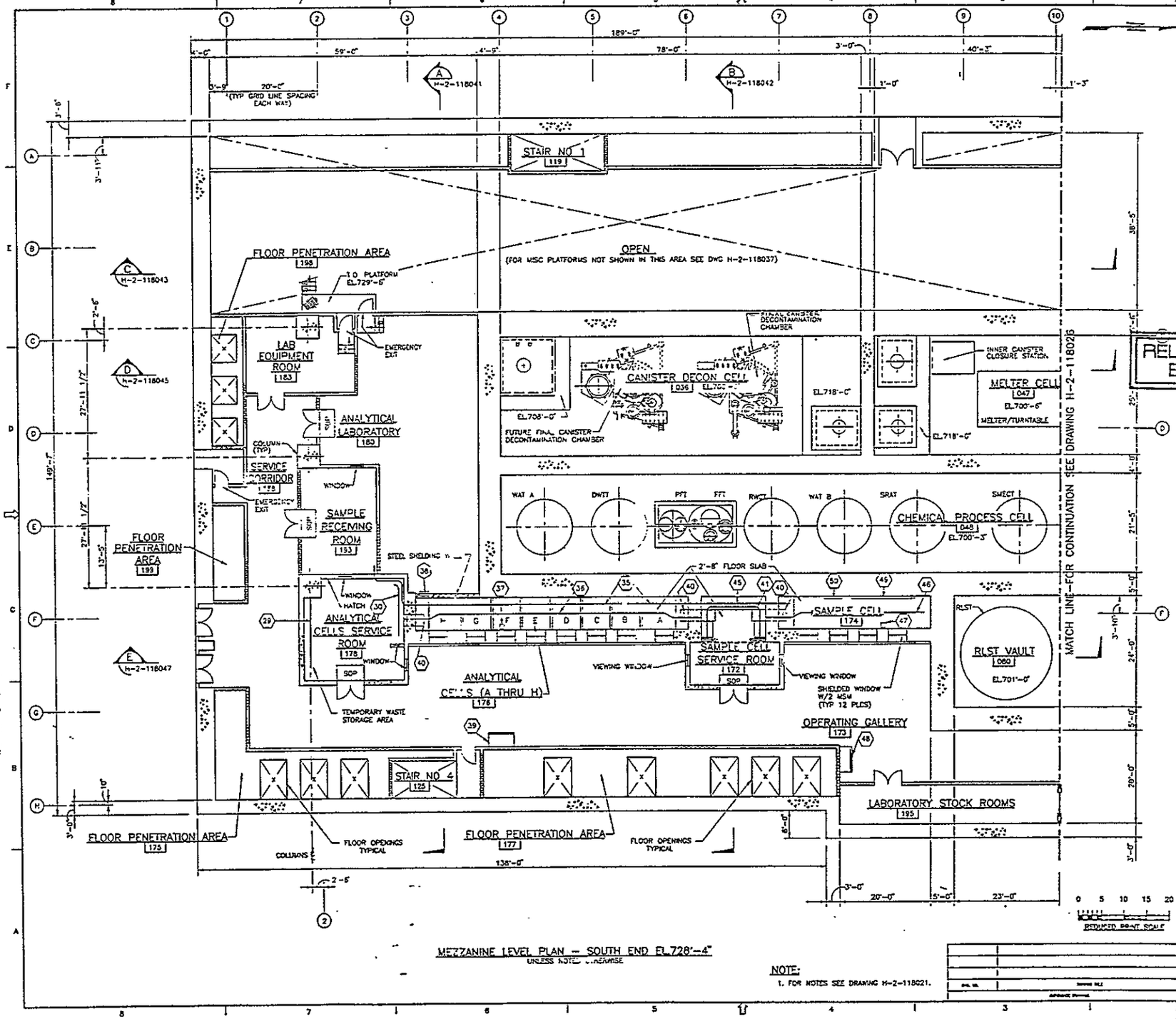


EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | HOOK-UP | DESCRIPTION |
|---|---|---|---|
| 29 | MH-640-004 | 10'-0" | MONORAIL |
| 30 | MH-640-003 | 10'-0" | MONORAIL |
| 33 | RE-630-001A | - | RABBIT SYSTEM (ANAL CELLS) |
| 34 | MH-630-002 | 12'-0" | MONORAIL (ANAL CELLS) |
| 37 | MTR-630-005-006 | 5'-0" | SAMPLE CART (ANAL CELLS) |
| 38 | HS1-710-001-012 | - | SHIELDED WINDOW |
| 39 | LP-630-002 | 7'-0" | ANALYTICAL CELLS LOCAL PANEL |
| 40 | TTR-630-001-013 | 4'-0" | TRANSFER DRAWER |
| 41 | MH-640-001 | 7'-0" | MONORAIL (SAMPLE CELL SVC RM) |
| 45 | RE-630-001B | - | RABBIT SYSTEM (SAMPLE CELL SERVICE) |
| 46 | MH-630-001 | 12'-0" | MONORAIL (SAMPLE CELL) |
| 47 | TR-630-004 | 3'-0" | SAMPLE CART (SAMPLE CELL) |
| 48 | LP-630-001 | 7'-0" | LIQUID SAMPLING SYSTEM LOCAL PANEL |
| 49 | SM-630-001-014 | 7'-0" | LIQUID SAMPLING MODULES (SAMPLE CELL) |
| 50 | SM-630-017-019 | 7'-0" | GAS SAMPLING MODULES (SAMPLE CELL) |

| REV | DESCRIPTION | DRN | CHK | APPR | APPR |
|---|---|---|---|---|---|
| D | ADDED FIRE DOOR & WALL TYPE OF WEST WALL OF RWT, DWT, PFT, FFT, WAT A & WAT B. ADDED 2'-8" FLOOR SLAB & SHIELD CELLS. ADDED DOOR OPNG & WALL TYP. NOTE OPNG AREA STANDLOUT & NOT DIC OF BLDG & DIC. ITEM 52 FROM DRAWING & STANDLOUT ARE PROJECT BASELINE APPROVAL | | | | |
| 01 | ADDED EMERGENCY EXIT CALLOUT IN RW NO. 182, PER CR NO HWVP-0441 | CEF | JRR | RPK | RMK |
| 00 | RELEASED FOR DETAILED DESIGN | CEF | JLS | RPK | RMK |
| | | JLS | FGB | OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____

| | |
|---|---|
| R GIBBONS | 10/5/90 |
| O CHANLA | 10/5/90 |
| J BROOKS | 10/5/90 |
| J SMITS | 10/5/90 |
| H KEENAN | 10/5/90 |
| R KUMAR | 10/25/90 |
| G KUTLANOFF | 10/25/90 |
| J GOUGE | 10/25/90 |
| C FAULKNER | 10/25/90 |

| | | | |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-118025 | 1 1 0 |

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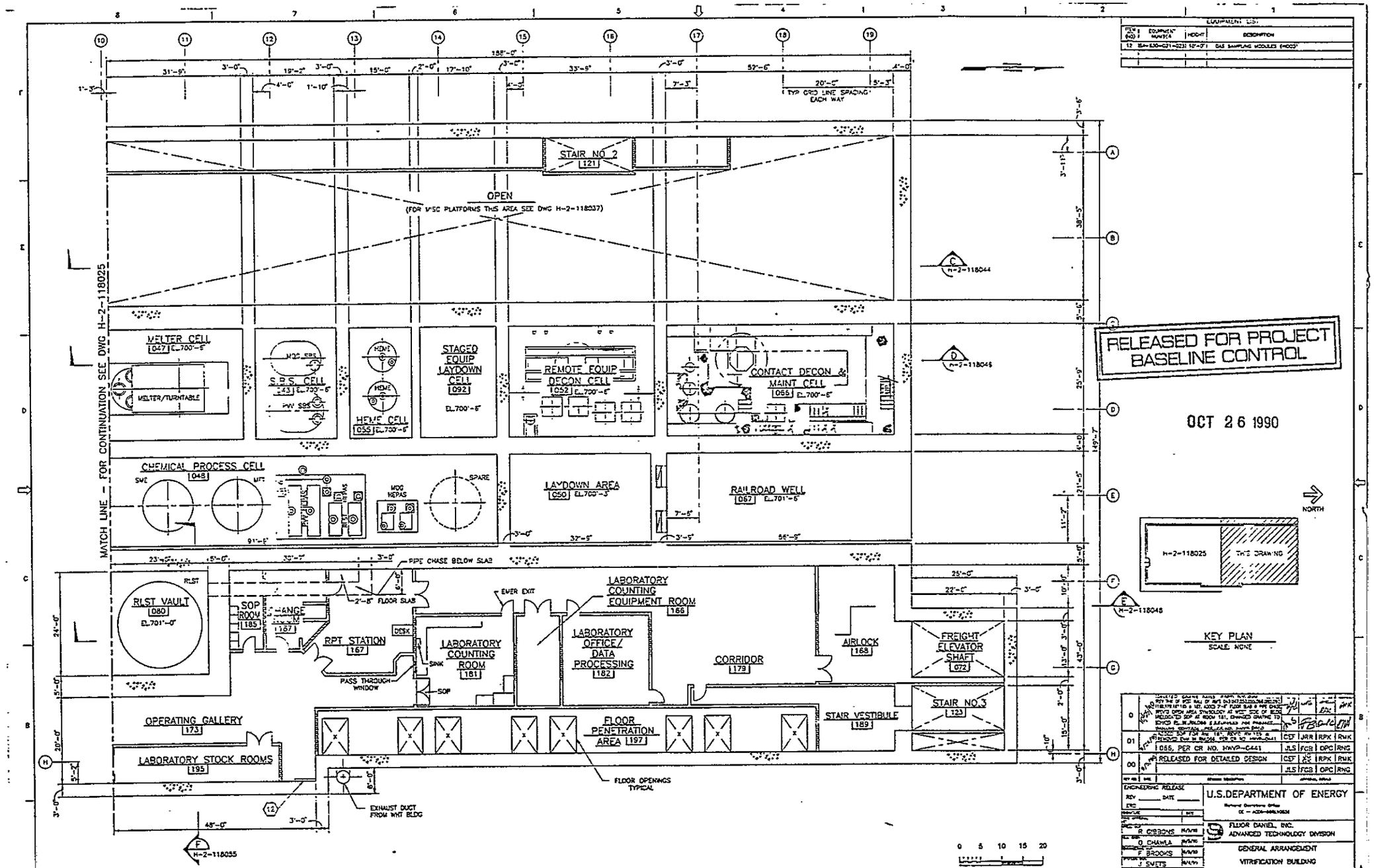

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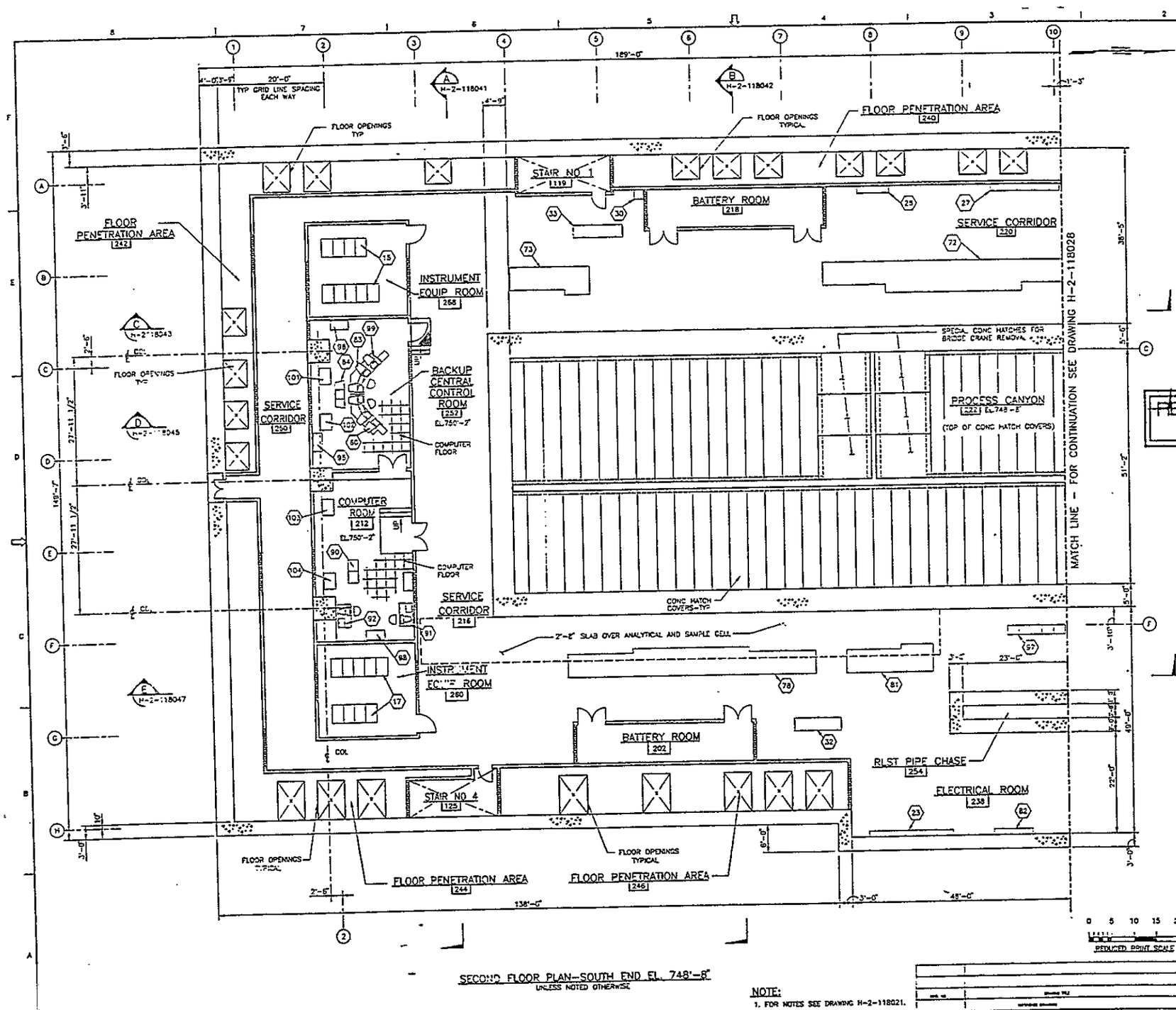


SECOND FLOOR PLAN-SOUTH END EL. 748'-8"
UNLESS NOTED OTHERWISE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

EQUIPMENT LIST

| PLAN NO. | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 15 | DP-810-301A THRU E | 7'-0" | DISTRIBUTED PROCESSING UNIT (FDS-01) |
| 17 | DP-810-302A THRU E | 7'-0" | DISTRIBUTED PROCESSING UNIT (FDS-02) |
| 23 | MC-324-201 | 8'-0" | 480V MOTOR CONTROL CENTER |
| 27 | MC-324-101 | 8'-0" | 480V MOTOR CONTROL CENTER |
| 29 | MC-329-101 | 8'-0" | 480V MOTOR CONTROL CENTER |
| 32 | MC-239-101 | 8'-0" | 480V MOTOR CONTROL CENTER |
| 32 | UP-34A-201 | 8'-0" | UPS PACKAGE #1 (EAST) |
| 33 | UP-34A-101 | 8'-0" | UPS PACKAGE #1 (WEST) |
| 72 | LC-324-101 | 8'-0" | 480V LOAD CENTER |
| 73 | LC-329-101 | 8'-0" | 480V LOAD CENTER |
| 78 | LC-324-201 | 8'-0" | 480V LOAD CENTER |
| 81 | LC-334-201 | 8'-0" | 480V LOAD CENTER |
| 82 | MC-334-201 | 8'-0" | 480V MOTOR CONTROL CENTER |
| 83 | DS-810-311,313 & 314 | | OPERATING STATION |
| 84 | — | — | OVERHEAD CCTV MONITOR |
| 90 | DS-810-328 & 329 | — | DATA STORAGE SUBSTATION |
| 91 | CP-810-051 & 053 | — | DCS HOST CPU & TERMINAL |
| 92 | LP-114-001 | 7'-0" | RLST LOCAL PANEL |
| 95 | — | 8'-0" | STORAGE CABINET (3-TOTAL) |
| 96 | DS-660-103 | — | MS TERMINAL |
| 98 | DS-670-330 | — | HPCS TERMINAL |
| 99 | DS-670-101 | — | HPCS MAIN HOST CPU |
| 101 | AC-05E-701 | — | PACKAGED AIR CONDITIONING UNIT |
| 102 | AC-05E-702 | — | PACKAGED AIR CONDITIONING UNIT |
| 103 | AC-05E-703 | — | PACKAGED AIR CONDITIONING UNIT |
| 104 | AC-05E-704 | — | PACKAGED AIR CONDITIONING UNIT |

| REV NO. | DATE | REVISION DESCRIPTION | APPROVAL DETAILS |
|---|---|---|---|
| 0 | 8/24/90 | MOVED EQUIP 101,172,183 & 104, DELETED STAIR 18 IN 248 & 250, ADDED EQUIP 83 & 84, MANIPULATOR REPAIR 2-32 ELEV. EQUIP USE, MOVED PROCESS CANYON IN 222 WEST WALL TO 51'-6" AND EAST WALL TO 3'-6", ADDED 2'-8" THICK SLAB OVER ANALYTICAL AND SAMPLE CELL, ADDED INS 705 & 706, MOVED EQUIP 17,19,23,27,29,32 & 33, MOVED STAIR 4 IN 212, MOVED FLOOR OPNGS. & INS 242 & RELEASED FOR PROJECT BASELINE CONTROL, PER CP NO HNWP-0-0456 | JLS JAG OPC RNG |
| 01 | 5/21/90 | MOVD DOORS @ RM 222, 216 & EQUIP NO. 9 TO NO 13 & 17 IN EQUIP LIST PER CP NO. HNWP-0-041 | CEF JRR RPK RWK JLS JAG OPC RNG |
| 00 | 8/24/90 | RELEASED FOR DETAILED DESIGN | CEF JRR RPK RWK JLS FCB OPC RNG |

ENGINEERING RELEASE
REV. _____ DATE _____
ENG _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SECOND FLOOR PLAN-SOUTH END

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| DRAWN BY J GOODE 8/21/90 | DWG NO. B-595 | FLUOR DANIEL NO. 845724 |
| CHECKED BY C FAULKNER 8/22/90 | SCALE 1/8"=1'-0" | SHEET NO. 1 |
| | | DRAWING NO. 3104 |

| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-118027 | 1 | 1 | 0 |

AUTOCAD 1 D0218027 19 OCT 90

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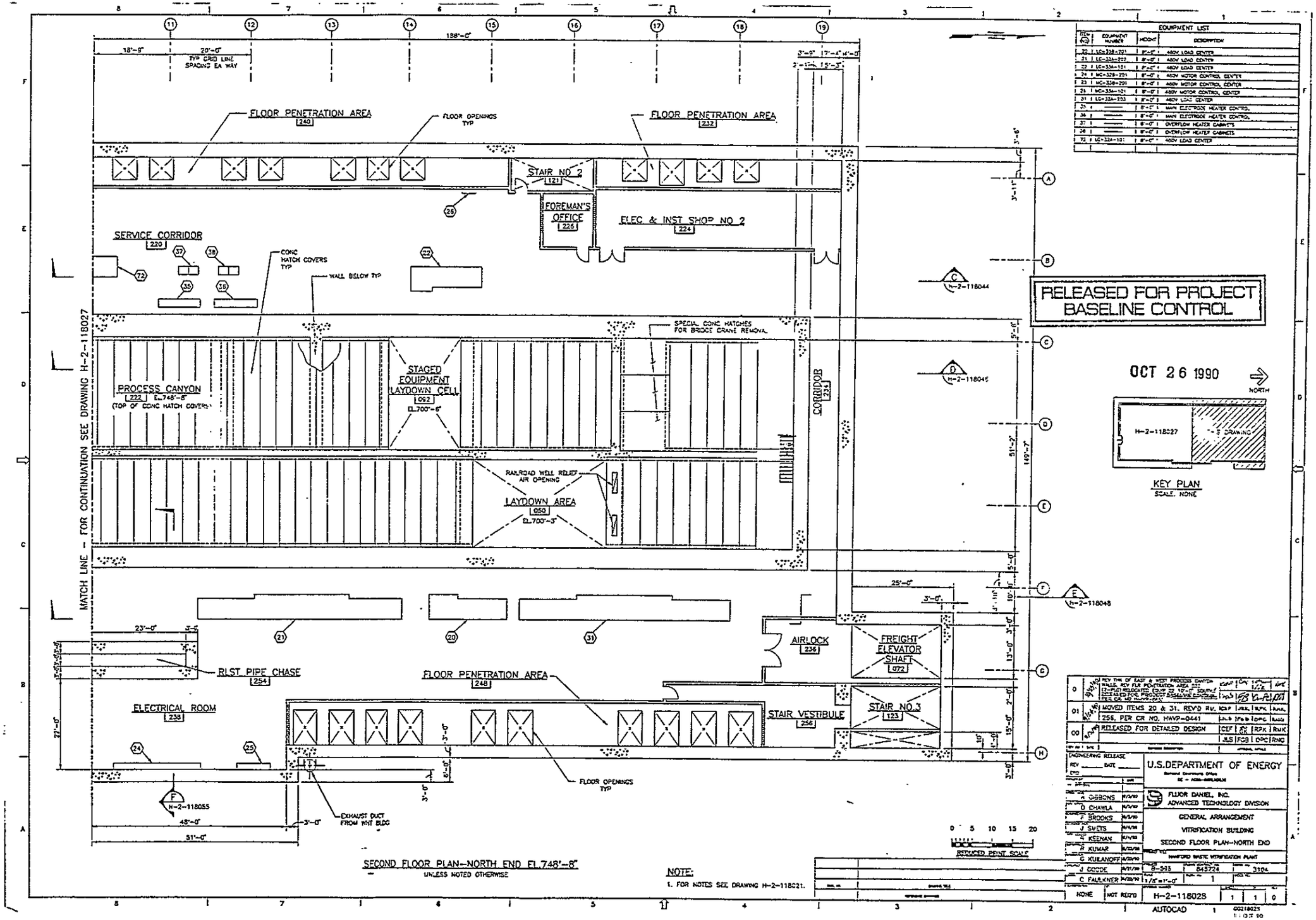

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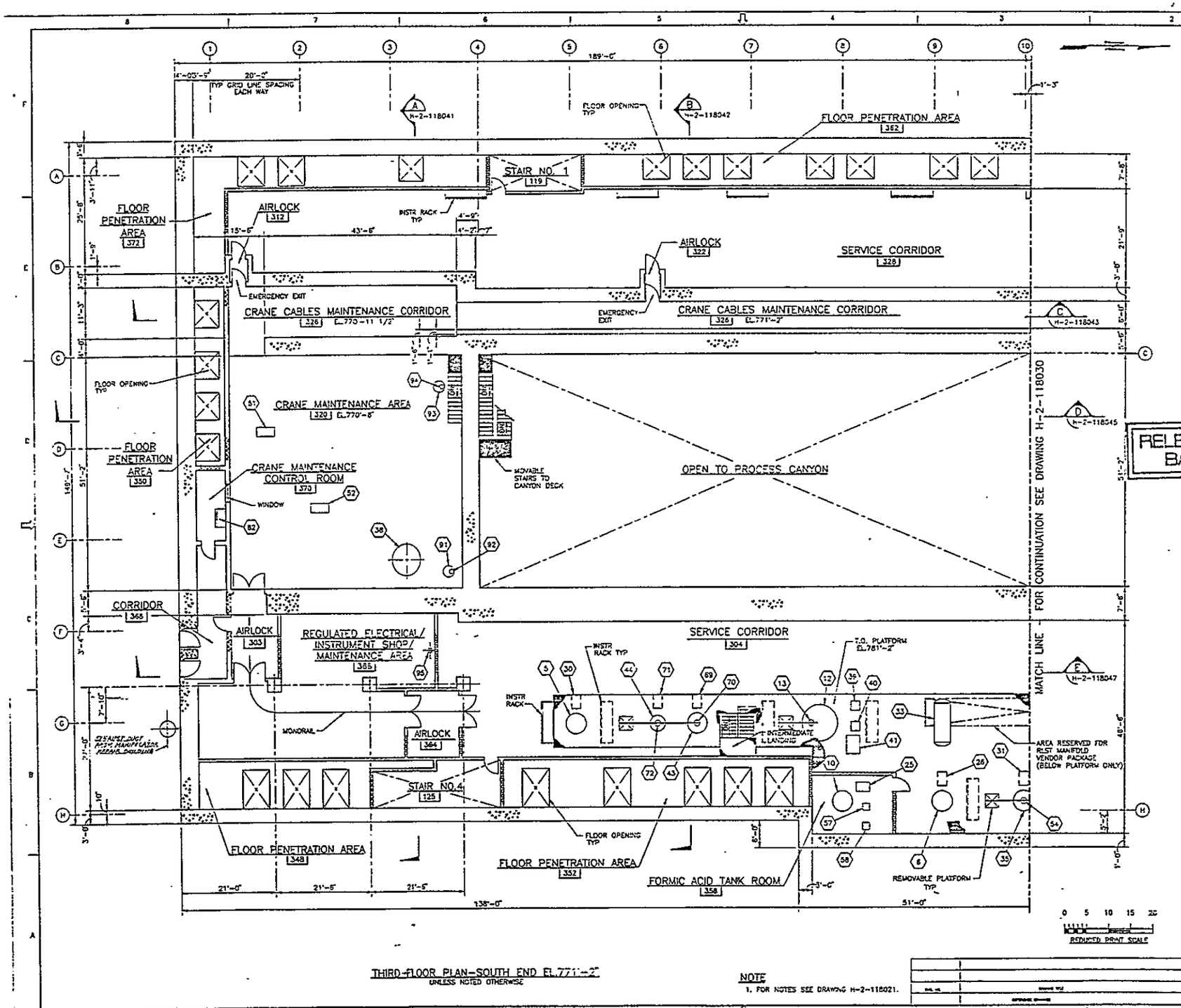


THIRD-FLOOR PLAN-SOUTH END EL.771'-2"
UNLESS NOTED OTHERWISE

NOTE
1. FOR NOTES SEE DRAWING H-2-118021.

EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 5 | TK-340-033 | 110'-0" | 50% CAUSTIC FEED TANK |
| 6 | TK-340-022 | 110'-0" | SUGAR SOLUTION FEED TANK |
| 10 | TK-340-006 | 110'-0" | FORMIC ACID FEED TANK |
| 12 | TK-340-002 | 110'-0" | PROCESS FRIT SLURRY FEED TANK |
| 13 | AG-340-003 | 11'-0" | PROCESS FRIT SLURRY FEED TANK AGITATOR |
| 25 | PX-340-009 | 11'-0" | FORMIC ACID FEED PUMP |
| 26 | PX-340-007 | 11'-0" | SUGAR SOLUTION FEED PUMP |
| 30 | PX-340-029 | 11'-0" | 50% CAUSTIC FEED PUMP |
| 31 | PX-340-006 | 11'-0" | KOH/FRIT MODIFIER FEED PUMP |
| 33 | TK-480-001 | 13'-0" | PROCESS WATER TANK |
| 35 | TK-340-008 | 13'-0" | KOH/FRIT MODIFIER FEED TANK |
| 38 | HC-210-001 | 17'-0" | MOVABLE CMA SHIELDED HOOK HOIST |
| 39 | PX-340-004 | 13'-0" | PROCESS FRIT SLURRY SAMPLE PUMP |
| 40 | PX-340-003 | 13'-0" | PROCESS FRIT SLURRY FEED PUMP |
| 41 | FX-340-007 | 13'-0" | PVST FILTER |
| 43 | TK-340-028 | 110'-0" | ZEOLITE SLURRY FEED TANK |
| 44 | TK-340-027 | 110'-0" | DIATOMACEOUS EARTH SLURRY FEED TANK |
| 51 | HO-210-026 | 125'-0" | CMA SCISSOR HOIST NO.1 |
| 52 | HO-210-027 | 125'-0" | CMA SCISSOR HOIST NO.2 |
| 54 | AG-340-005 | 110'-0" | KOH/FRIT MODIFIER FEED TANK AGITATOR |
| 57 | FO-340-001A | 117'-0" | ORGANIC ACID VENT HEPA FILTER |
| 58 | FO-340-001B | 117'-0" | ORGANIC ACID VENT HEPA FILTER |
| 69 | PX-340-033 | 11'-0" | ZEOLITE SLURRY FEED PUMP |
| 70 | AG-340-016 | 110'-0" | ZEOLITE SLURRY FEED TANK AGITATOR |
| 71 | PX-340-031 | 11'-0" | DIATOMACEOUS EARTH SLURRY FEED PUMP |
| 72 | AG-340-014 | 110'-0" | DIATOMACEOUS EARTH SLURRY FEED TANK AGITATOR |
| 82 | LP-210-001 | 7'-0" | CMA LOCAL PANEL |
| 91 | SD-20C-008 | 1'-3"-0" | CRANE MAINTENANCE AREA SUMP NO 1 |
| 92 | PX-20C-022 | 12'-0" | CRANE MAINTENANCE AREA SUMP NO 1 PUMP |
| 93 | SD-20C-009 | 1'-3"-0" | CRANE MAINTENANCE AREA SUMP NO 2 |
| 94 | PX-20C-023 | 12'-0" | CRANE MAINTENANCE AREA SUMP NO 2 PUMP |
| 95 | SD-20C-015 | 1'-1"-0" | REGULATED MAINTENANCE AREA SUMP |

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NORTH

KEY PLAN
SCALE: NONE

| REV. | DATE | DESCRIPTION | DRAWN | CHKD | ENGR | PROJ |
|---|---|---|---|---|---|---|
| D | 9/26/90 | REVISED EXHAUST DUCT ZEOLITE & FORMIC ACID TANK ROOM AS BUILT PER DF & AS BUILTS. REVISED INSTR RACK SYMBOLOGY IN RM 328. REVISED SIZE OF INSTR RACKS IN RM 304. REVISED FOR OFFICE IN RM 372. ADDED RESERVED AREA IN RM 304. REVISED LOCATION OF COILS IN RM 304. REVISED WALL LOCATION & THICKNESS IN RM 328. ISSUED RELEASED FOR PROJECT BASELINE CONTROL PER CH NO. HWVP-0450 | JHH | WFS | RPK | RMK |
| D1 | 8/24/90 | REVISED STAIR IN PROCESS CANYON AS DESCRIPTION OF ITEM 71 IN EQUIP. LIST, PER CH NO. HWVP-0441 | CEF / JLS | JRR / FCB | RPK / OPC | RMK / RNG |
| 00 | 8/24/90 | RELEASED FOR DETAILED DESIGN | TJH / JLS | RPK / FCB | RMK / OPC | RMK / RNG |

ENGINEERING RELEASE
REV. ____ DATE ____
ENG ____

| | | |
|---|---|---|
| DRAWN | R GIBBONS | 9/5/90 |
| ENGR | D CHAWLA | 9/5/90 |
| PROJ ENGR | J BROOKS | 9/5/90 |
| PROJ MGR | J SMETS | 9/4/90 |
| SUB MGR | R KEENAN | 9/4/90 |
| SUPERVISOR | R KUMAR | 9/22/90 |
| SUPERVISOR | G KUILANOFF | 9/22/90 |
| DESIGNED | J GOODE | 8/21/90 |
| CHECKED | T HORVATH | 8/21/90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
THIRD FLOOR PLAN-SOUTH END

HANFORD WASTE VITRIFICATION PLANT

| SCALE | DRAWING NO. | SHEET | REV. |
|---|---|---|---|
| 1/8"=1'-0" | 845724 | 3104 | |

| NONE | NOT REQ'D | H-2-118029 | 1 | 1 | 0 |
|---|---|---|---|---|---|

AUTOCAD 1 DC218029 11 OCT 90

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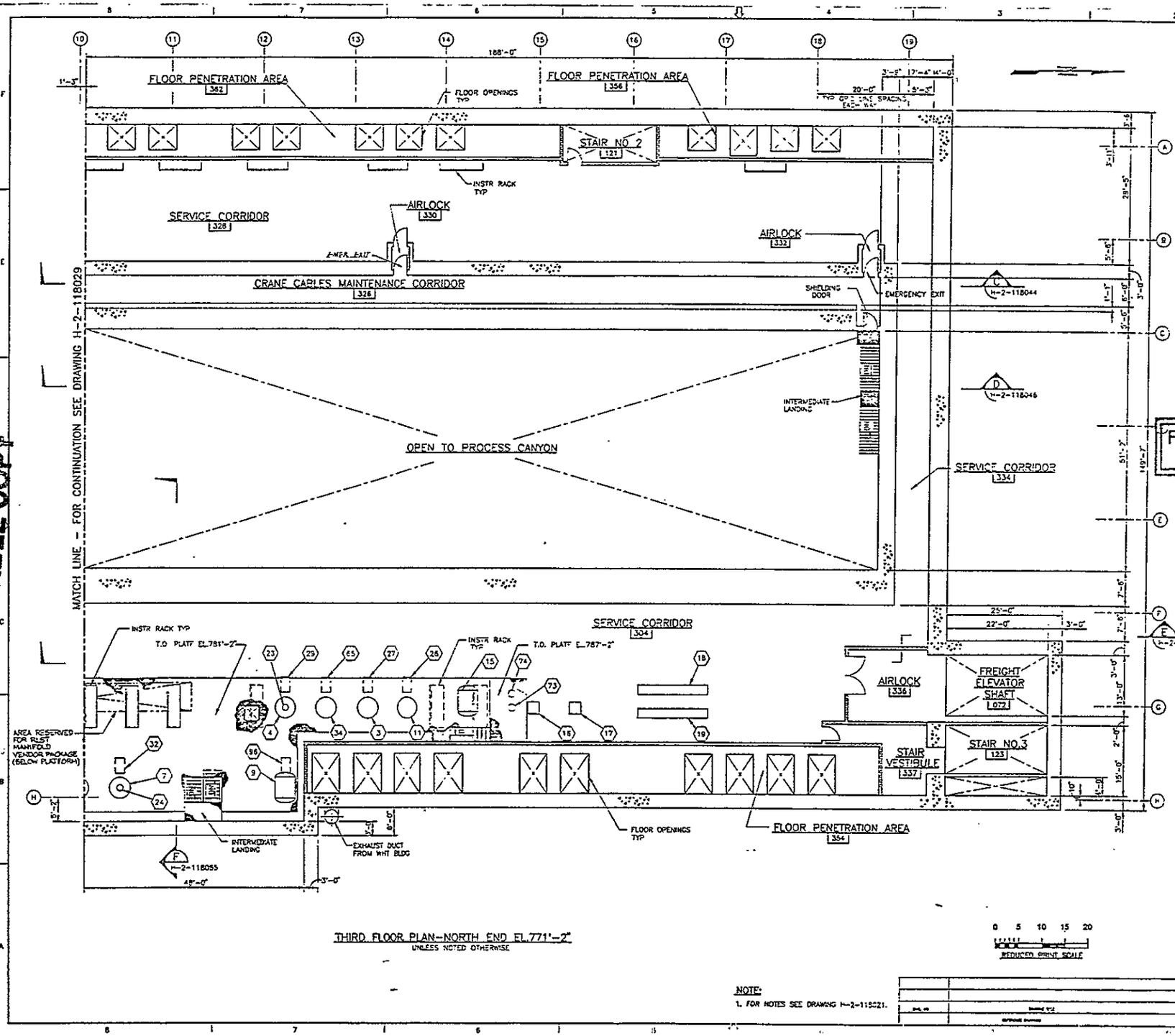

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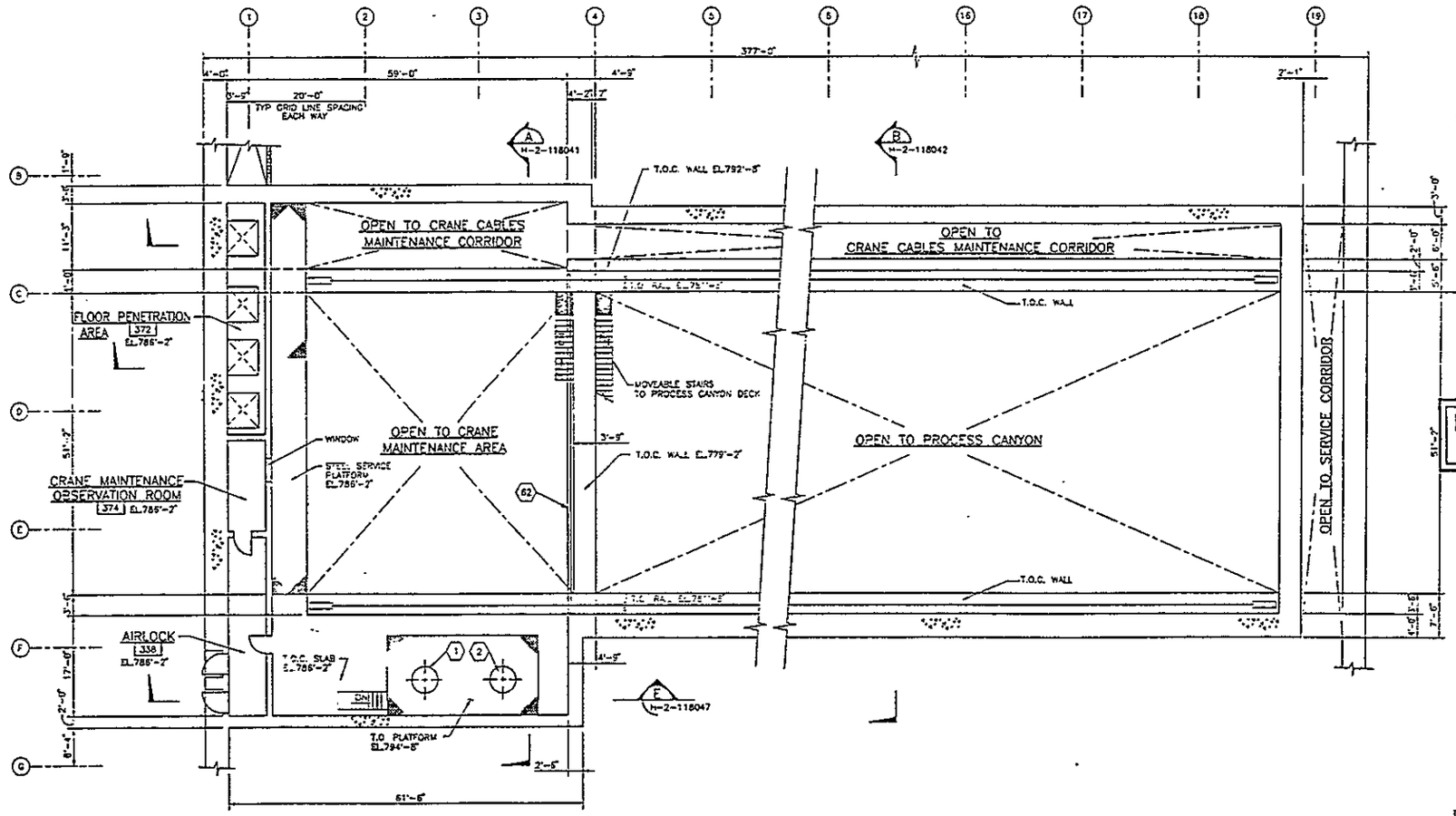
9112170023

EQUIPMENT LIST

| REV | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 1 | PK-210-001 | 9'-0" | CRANE DECON FEED TANK (CAUSTIC) |
| 2 | PK-210-002 | 9'-0" | CRANE DECON FEED TANK (ACID) |
| 62 | HO-210-032 | 23'-0" | CRN SHIELD DOOR |




THIRD FLOOR MEZZANINE & CRANE RAIL PLAN

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

| REV | DATE | DESCRIPTION | DWN | CHK | APPD |
|---|---|---|---|---|---|
| 0 | 10/25/90 | REVISED DWG TO CHECK PL 6000 NOTE FOR WORKING STAIRS, EDIT WALL LOCATION & THICKNESS AT CO. LINE 5 & CRANE RAIL PLAN FOR RELEASE FOR BASELINE CONTROL | JJS | DMV | |
| 00 | 8/13/90 | RELEASED FOR DETAILED DESIGN | TJH | RPK | RWK |
| | | | JLS | FGB | OPC RNG |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | | |
|---|---|---|
| DRAWN BY | R GIBBONS | 8/9/90 |
| DESIGNED BY | D CHAWLA | 8/9/90 |
| CHECKED BY | F BROOKS | 8/9/90 |
| ENGINEER | J SMETS | 8/9/90 |
| PROJECT ENGR | R KEENAN | 8/9/90 |
| SUPERVISOR | R KUMAR | 8/20/90 |
| MANAGER | G KUILANOFF | 8/21/90 |
| DRAFTING SUPV | J GOODE | 8/27/90 |
| DRAFTING | T HORVATH | 8/27/90 |

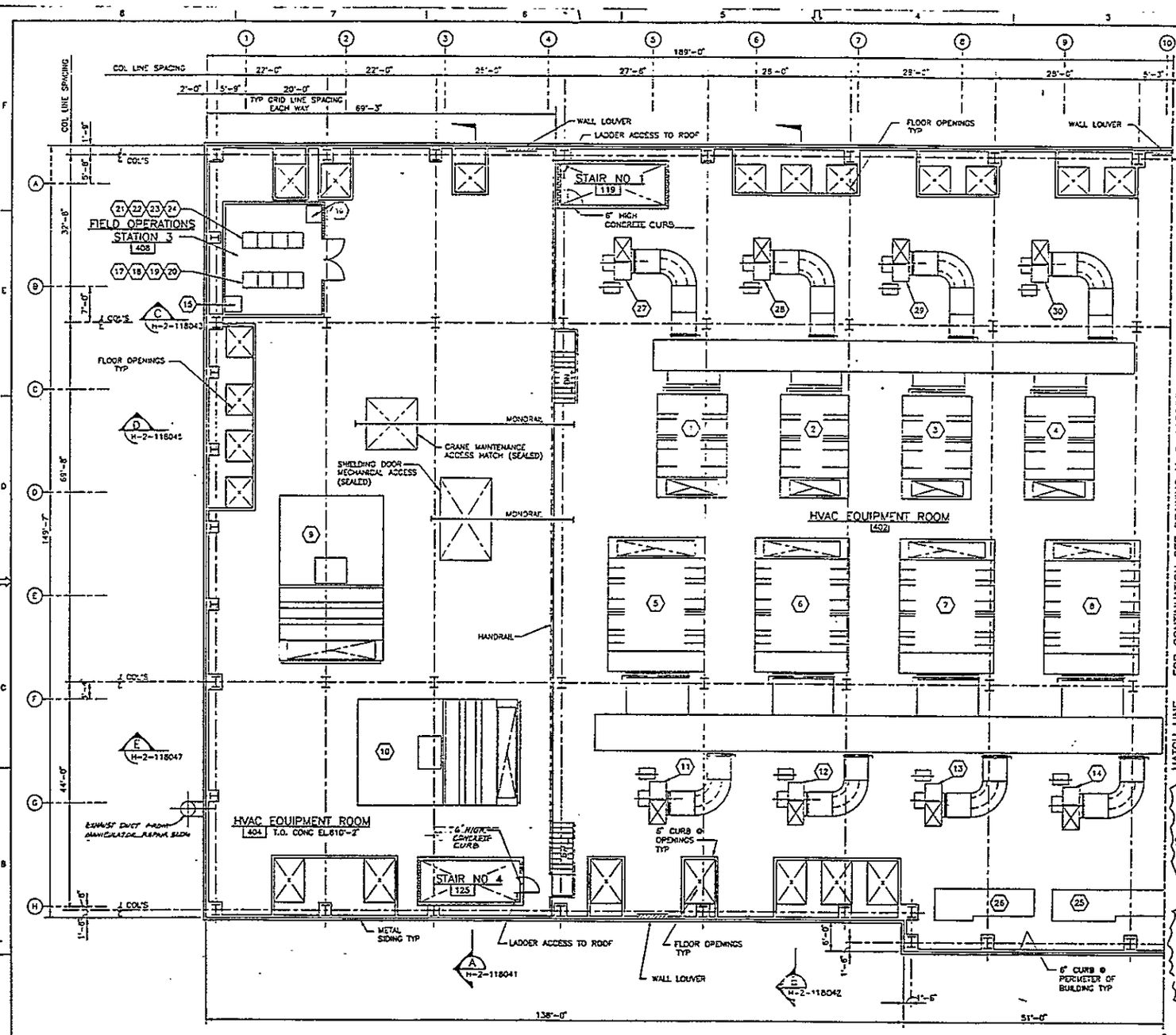
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
3RD FLOOR MEZZANINE &
CRANE RAIL PLAN

PROJECT TITLE: HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| SCALE | B-595 | 845724 | 3104 |
| SCALE | 1/8"=1'-0" | SHEET NO. 1 | |

| | | | |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-118031 | 1 1 0 |

F7218031

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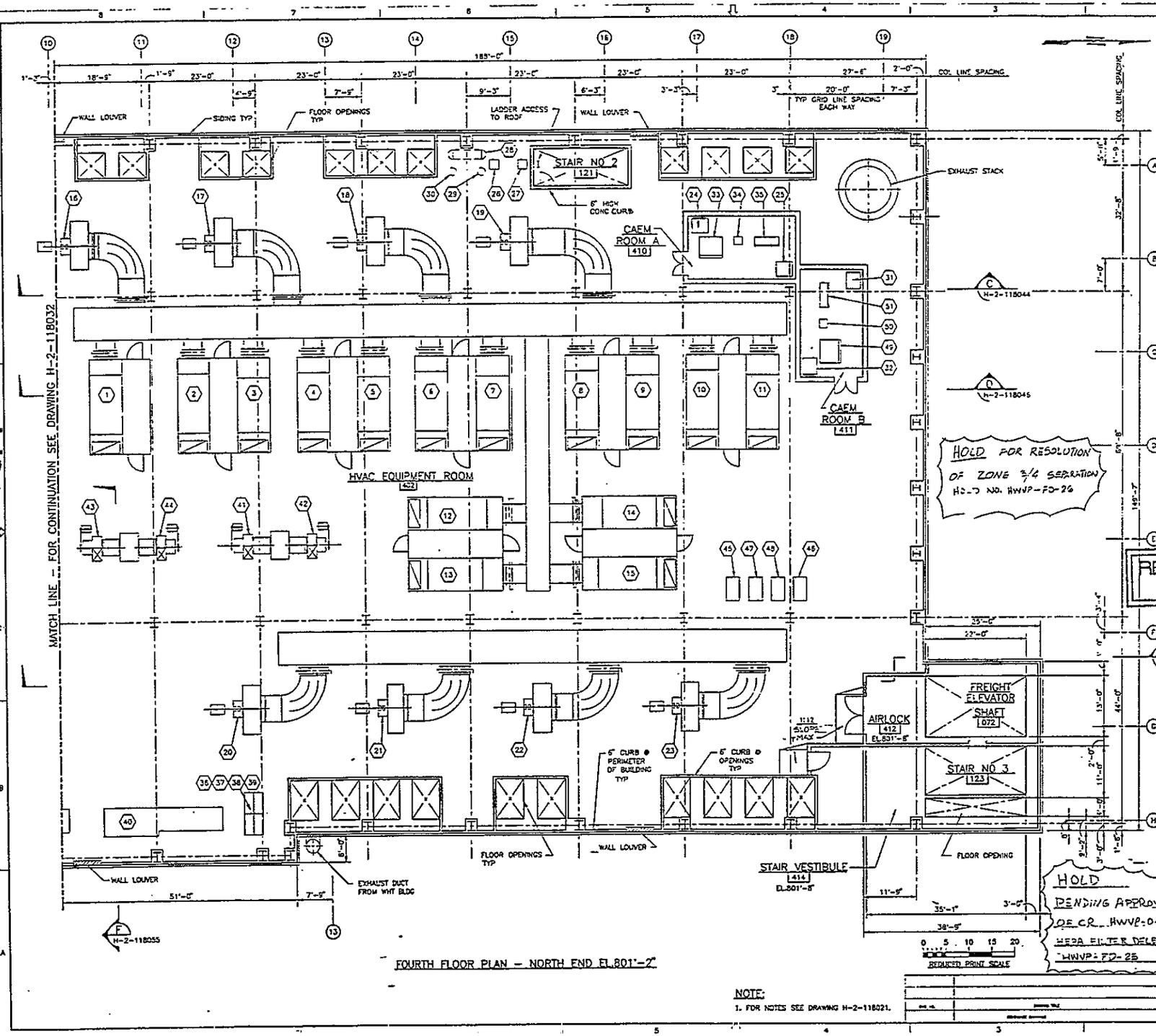


EQUIPMENT LIST

| EQUIPMENT NUMBER | HOCHT | DESCRIPTION |
|---|---|---|
| 1 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 2 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 3 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 4 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 5 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 6 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 7 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 8 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 9 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 10 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 11 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 12 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 13 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 14 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 15 | — | 1 ZONE 2 EXHAUST HEPA FILTER PLENUM |
| 16 | — | 1 ZONE 2 EXHAUST FAN |
| 17 | — | 1 ZONE 2 EXHAUST FAN |
| 18 | — | 1 ZONE 2 EXHAUST FAN |
| 19 | — | 1 ZONE 2 EXHAUST FAN |
| 20 | — | 1 ZONE 2 SUPPLY AIR FAN |
| 21 | — | 1 ZONE 2 SUPPLY AIR FAN |
| 22 | — | 1 ZONE 2 SUPPLY AIR FAN |
| 23 | — | 1 ZONE 2 SUPPLY AIR FAN |
| 24 | — | 1 PACKAGED AIR CONDITIONING UNIT |
| 25 | — | 1 PACKAGED AIR CONDITIONING UNIT |
| 26 | — | 1 HEAT RECOVERY PUMP |
| 27 | — | 1 HEAT RECOVERY PUMP |
| 28 | — | 1 COMPRESSOR TANK |
| 29 | — | 1 AIR SEPARATOR TANK |
| 30 | — | 1 CHEMICAL MIX TANK |
| 31 | — | 1 PACKAGED AIR CONDITIONING UNIT |
| 32 | — | 1 PACKAGED AIR CONDITIONING UNIT |
| 33 | — | 1 CONTINUOUS AIR EMISSION MONITOR |
| 34 | — | 1 VACUUM PUMP |
| 35 | — | 1 DOMESTIC PROBE CONTROL LOCAL PANEL |
| 36 | — | 1 480V MOTOR CONTROL CENTRAL PANEL |
| 37 | — | 1 480V MOTOR CONTROL CENTRAL PANEL |
| 38 | — | 1 480V MOTOR CONTROL CENTRAL PANEL |
| 39 | — | 1 480V MOTOR CONTROL CENTRAL PANEL |
| 40 | — | 1 13.8 KV LOAD CENTER |
| 41 | — | 1 ZONE 2 VARIABLE AIR VOLUME HOODS EXHAUST FAN |
| 42 | — | 1 ZONE 2 VARIABLE AIR VOLUME HOODS EXHAUST FAN |
| 43 | — | 1 ZONE 2 CONSTANT AIR VOLUME HOODS EXHAUST FAN |
| 44 | — | 1 ZONE 2 CONSTANT AIR VOLUME HOODS EXHAUST FAN |
| 45 | — | 1 COLD FEED VENT HEPA FILTER |
| 46 | — | 1 COLD FEED VENT HEPA FILTER |
| 47 | — | 1 COLD FEED VENT BLOWER |
| 48 | — | 1 COLD FEED VENT BLOWER |
| 49 | — | 1 CONTINUOUS AIR EMISSION MONITOR |
| 50 | — | 1 VACUUM PUMP |
| 51 | — | 1 DOMESTIC PROBE CONTROL LOCAL PANEL |

| | | |
|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL | |
| 01 | PER CR NO. HWVP-0441 | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
NOV ____ DATE ____
END

NONE | NOT REQ'D | H-2-118033 | 1 | 1 | 0

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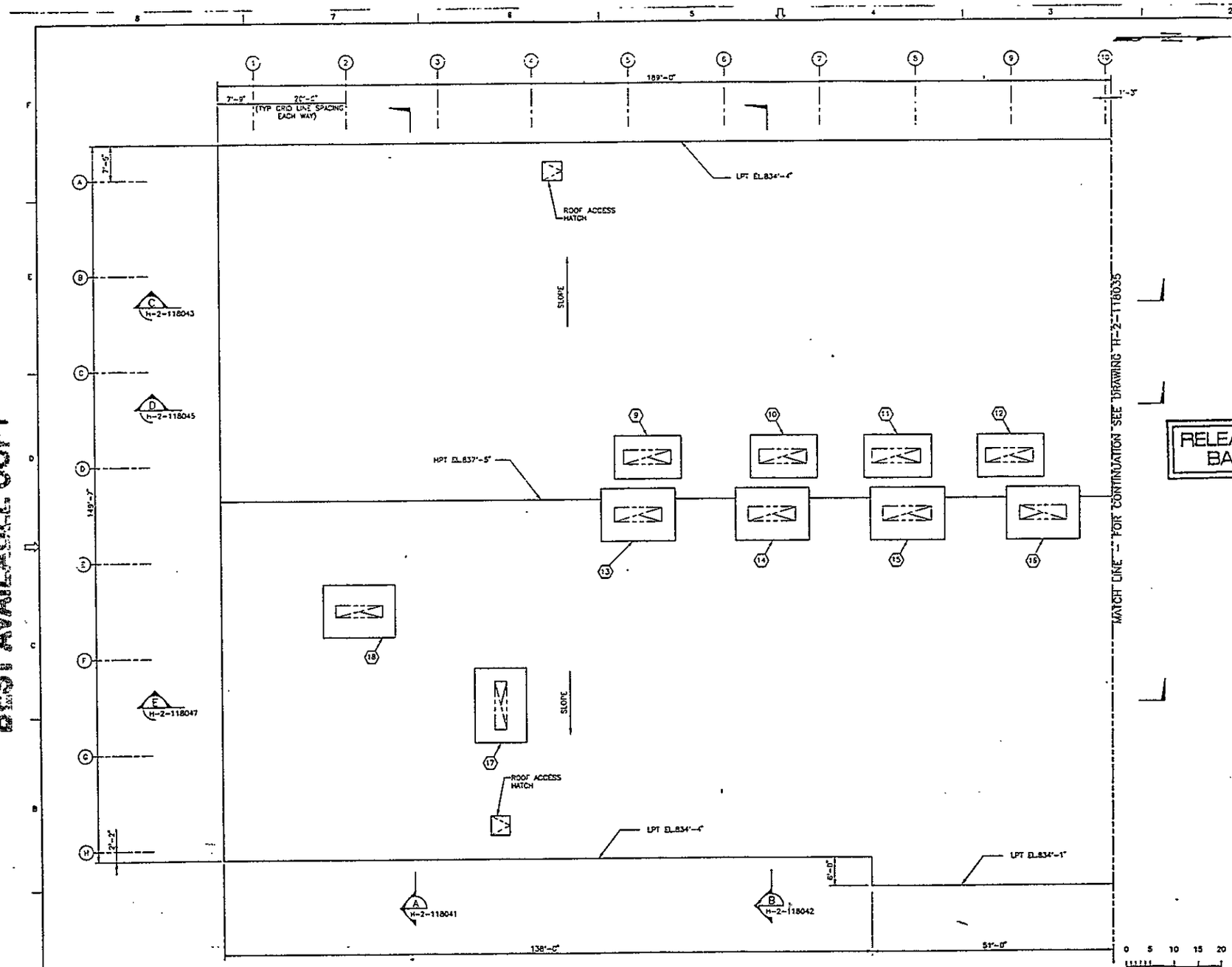
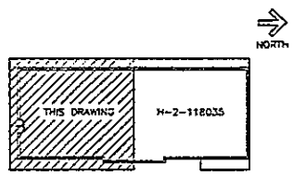



ROOF PLAN—SOUTH END

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

EQUIPMENT LIST

| ITEM (E3) | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 9 | HX-056A-701 | 8'-0" | HVT BLDG ZONE I SUPPLY AIR INTAKE |
| 10 | HX-056A-702 | 8'-0" | HVT BLDG ZONE I SUPPLY AIR INTAKE |
| 11 | HX-056A-703 | 8'-0" | HVT BLDG ZONE I SUPPLY AIR INTAKE |
| 12 | HX-056A-704 | 8'-0" | HVT BLDG ZONE I SUPPLY AIR INTAKE |
| 13 | HX-056B-701 | 8'-0" | HVT BLDG ZONE H SUPPLY AIR INTAKE |
| 14 | HX-056B-702 | 8'-0" | HVT BLDG ZONE H SUPPLY AIR INTAKE |
| 15 | HX-056B-703 | 8'-0" | HVT BLDG ZONE H SUPPLY AIR INTAKE |
| 16 | HX-056B-704 | 8'-0" | HVT BLDG ZONE H SUPPLY AIR INTAKE |
| 17 | HX-056C-701 | 8'-0" | HVT BLDG ZONE N SUPPLY AIR INTAKE |
| 18 | HX-056C-702 | 8'-0" | HVT BLDG ZONE N SUPPLY AIR INTAKE |

| REV | DATE | DESCRIPTION | BY | CHK | APPR |
|---|---|---|---|---|---|
| 0 | 10/26/90 | REVISED EQUIP NUMBERS ITEM 9 THRU 18 PER CASE 90-0667 FOR PROJECT BASELINE CONTROL. REF DR NO. WHA-0450 | KK | RPK | RWK |
| 00 | 9/5/90 | RELEASED FOR DETAILED DESIGN | ICD | RPK | RWK |

ENGINEERING RELEASE
REV ____ DATE ____
END

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE — RL06-89RL10630

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | | |
|---|---|---|
| R GIBBONS | 9/5/90 | |
| O CHAWLA | 9/5/90 | |
| F BROOKS | 9/5/90 | |
| J SMETS | 9/4/90 | |
| R KEENAN | 9/4/90 | |
| R KUMAR | 9/5/90 | |
| G KURLANOFF | 9/5/90 | |
| J GOODE | 9/5/90 | |
| C FAULKNER | 10/25/90 | |

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
ROOF PLAN—SOUTH END

HANFORD WASTE VITRIFICATION PLANT

DRAWING SERVICE NO. 845724
SHEET NO. 1
DRAWING NO. 3104

SCALE: 1/8"=1'-0"
NONE | NOT REQ'D | H-2-118034 | 1 | 1 | 0

AUTOCAD 1 H218034

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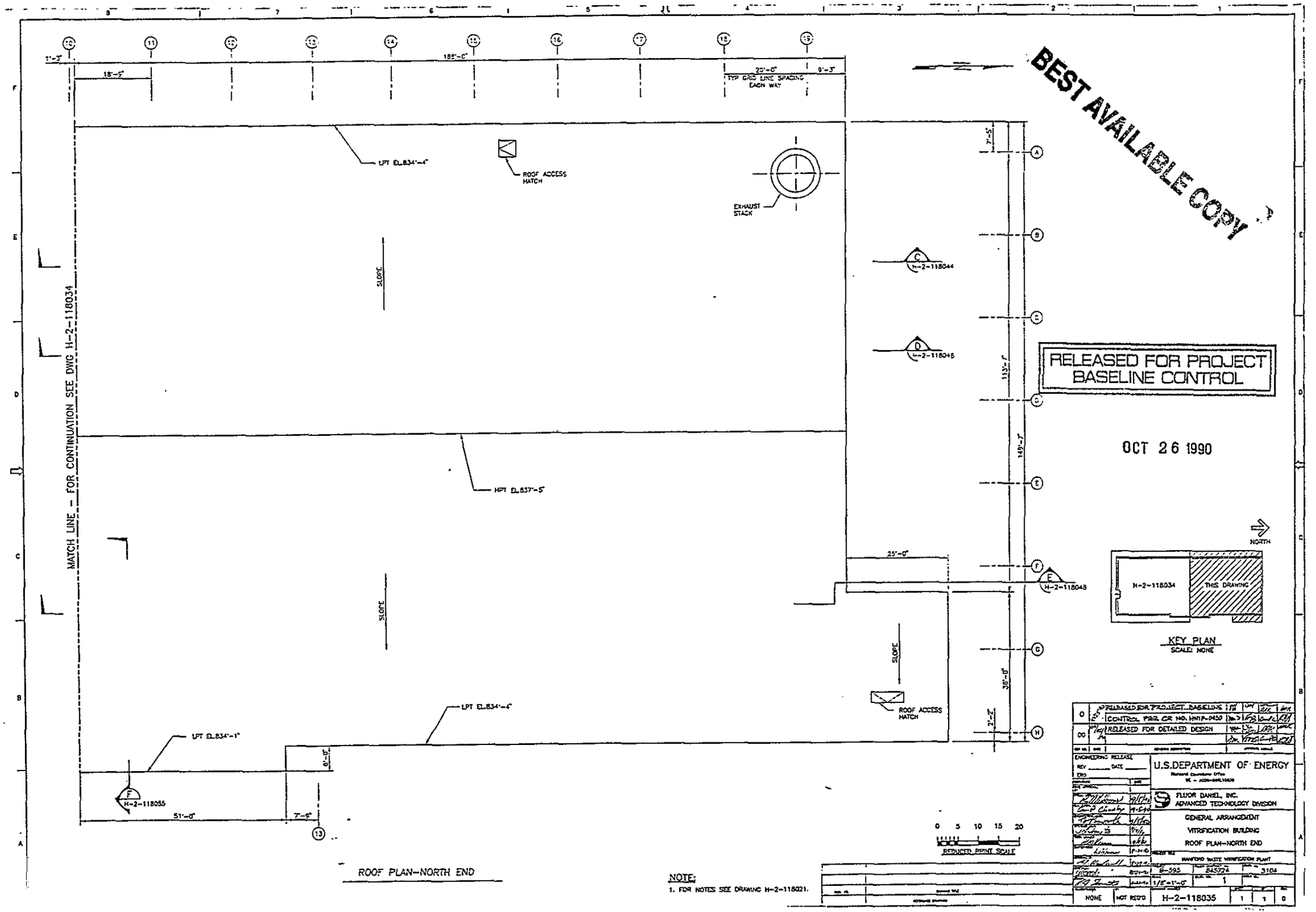
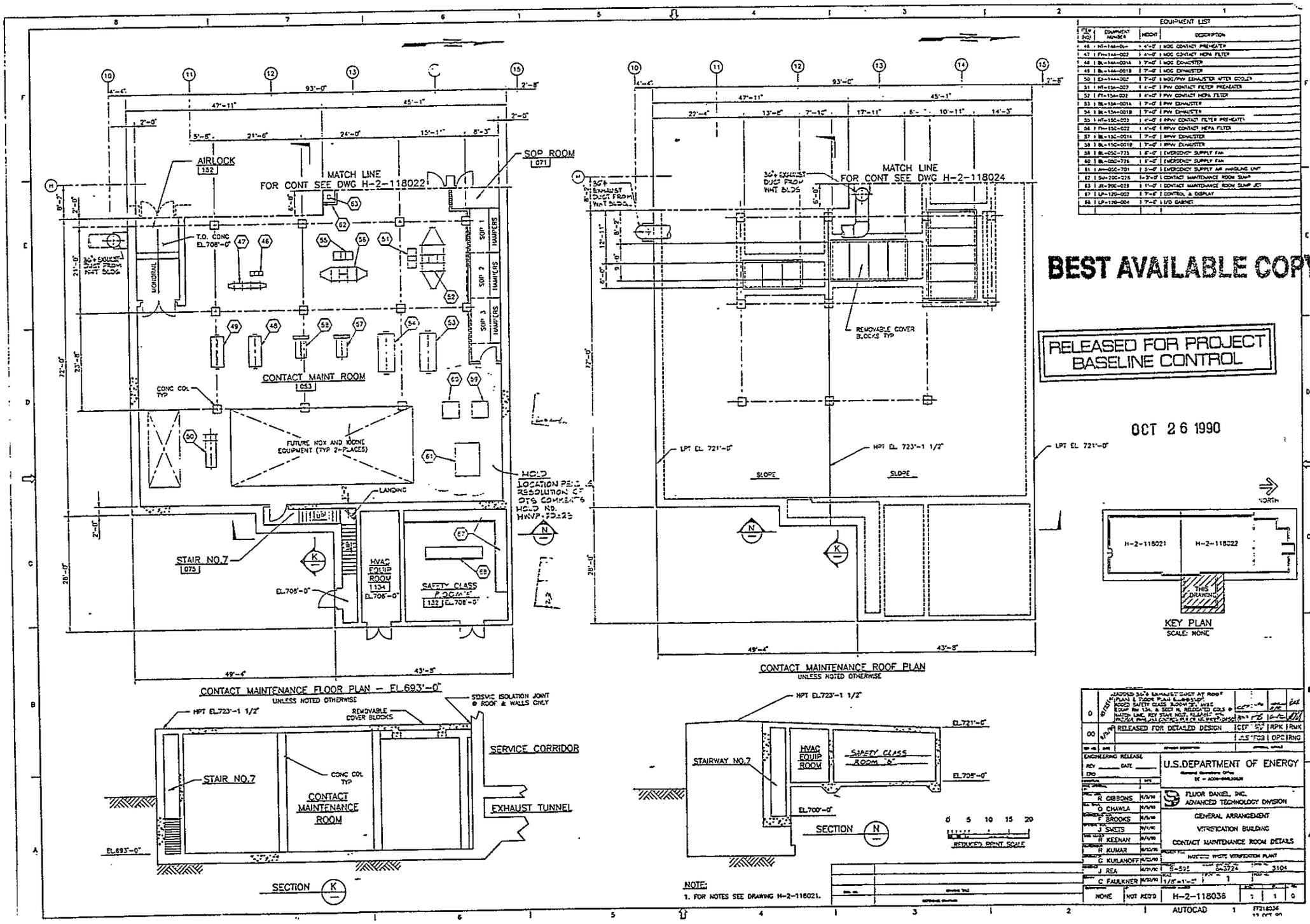



ROOF PLAN–NORTH END

9112117092

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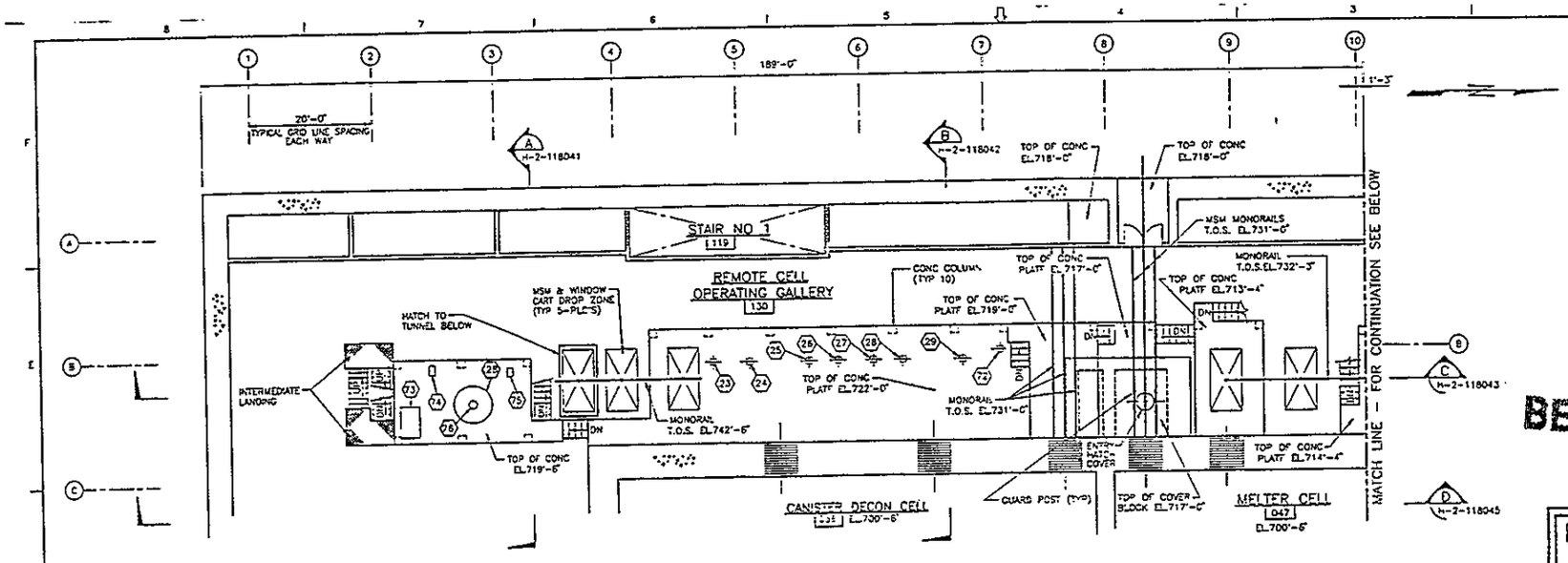


PARTIAL PLAN - MISC PLATFORMS ELEVATIONS AS NOTED

| ITEM NO. | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 1 | TK-340-017 | — | OXALIC ACID DECON FEED TANK |
| 3 | TK-340-016 | — | NITRIC ACID DECON FEED TANK |
| 19 | TK-340-001 | — | MELTER COOLING WATER EXPANSION TANK |
| 23 | PX-16A-001 | — | FCOC NOZZLE FEED PUMP # 1 |
| 24 | PX-16A-002 | — | FCOC NOZZLE FEED PUMP # 2 |
| 25 | PX-16A-003 | — | FCOC NOZZLE FEED PUMP # 3 |
| 26 | PX-16A-004 | — | FCOC NOZZLE FEED PUMP # 4 |
| 27 | PX-16A-005 | — | FCOC NOZZLE FEED PUMP # 5 |
| 28 | PX-16A-006 | — | FCOC NOZZLE FEED PUMP # 6 |
| 29 | PX-16A-007 | — | FCOC NOZZLE FEED PUMP # 7 |
| HC | FFM-460-001A&B | — | MELTER COOLING WATER HEPA FILTERS |
| 69 | FM-430-001 | — | PROCESS CONDENSATE HEPA FILTERS |
| 70 | FM-430-001 | — | PROCESS CONDENSATE HEPA FILTERS |
| 71 | CD-430-001 | — | PROCESS STEAM CONDENSATE CONDENSER / COOLER |
| 46 | CS-430-001V | — | ELECTRIC STEAM GENERATOR |
| 72 | PX-16A-008 | — | FCOC RIBBON NOZZLE FEED PUMP |
| 73 | FL-580-003V | — | OFGFT FILTER |
| 74 | PX-580-005 | — | OFGFT RECIRCULATION PUMP |
| 75 | PX-580-006 | — | OFGFT SAMPLE PUMP |
| 76 | AG-580-003 | — | OFGFT AGITATOR |

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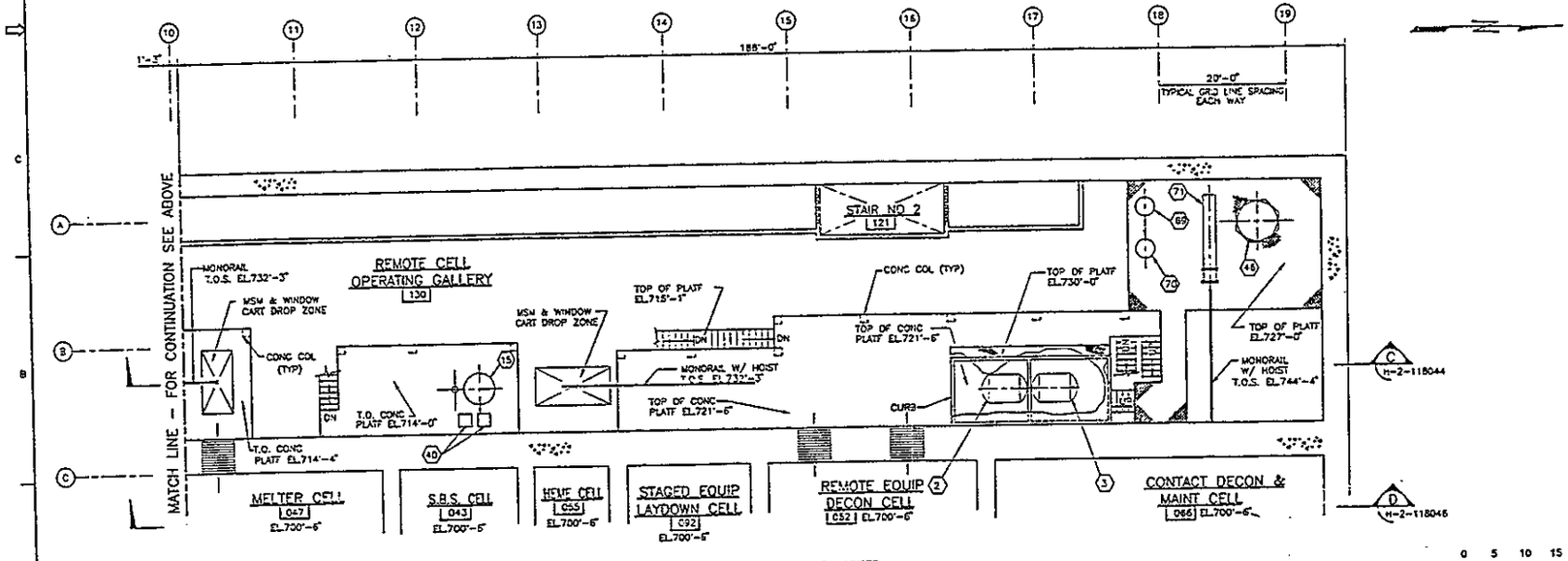
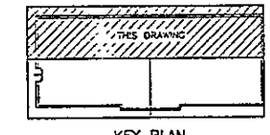
RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




PARTIAL PLAN - MISC PLATFORMS ELEVATIONS AS NOTED




KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

| REV | DATE | DESCRIPTION | DRAWN | CHECKED | APPROVED |
|---|---|---|---|---|---|
| 0 | 10/25/90 | REVD THE OF WEST PROCESS CANYON WALL & EXTENDED ADJACENT PLATFORMS INCORPORATE DELETED PLATFORM LOCATION DIMENSIONS REVD GRID SYMBOLOGY TO CONFO FL @ PLATF EL.730'-0" & ADDED CONFO FL @ PLATF EL.730'-0" & RELEASED FOR PROJECT BASELINE CONTROL PER CHANGE NOTICE WSF-0453 | JLW | RRK | RMK |
| 01 | 8/21/90 | ADDED HATCH TO TUNNEL IN ROOM 130 & REVD SECT "C" DWG NO. TO 118041 PER CR NO. HNVP-0441. | CSF | JRR | RPK | RMK |
| 00 | 8/21/90 | RELEASED FOR DETAILED DESIGN | JLS | FGB | OPC | RNG |
| | | | JLS | FGB | OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

| | | |
|---|---|---|
| R GIBBONS | 8/3/90 | |
| O CHAWLA | 8/3/90 | |
| F BROOKS | 8/6/90 | |
| J SVETS | 8/6/90 | |
| K KEENAN | 8/6/90 | |
| H KUMAR | 8/22/90 | |
| G KULANOFF | 8/22/90 | |
| J GOODE | 8/22/90 | |
| T HORVATH | 8/22/90 | |

U.S.DEPARTMENT OF ENERGY
Richland Operations Office
DE - 0008-0001/0808

FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
MISCELLANEOUS PLATFORMS

HANFORD WASTE VITRIFICATION PLANT

| SCALE | DRAWN | CHECKED | APPROVED |
|---|---|---|---|
| 1/8"=1'-0" | B-395 | 845724 | 3104 |

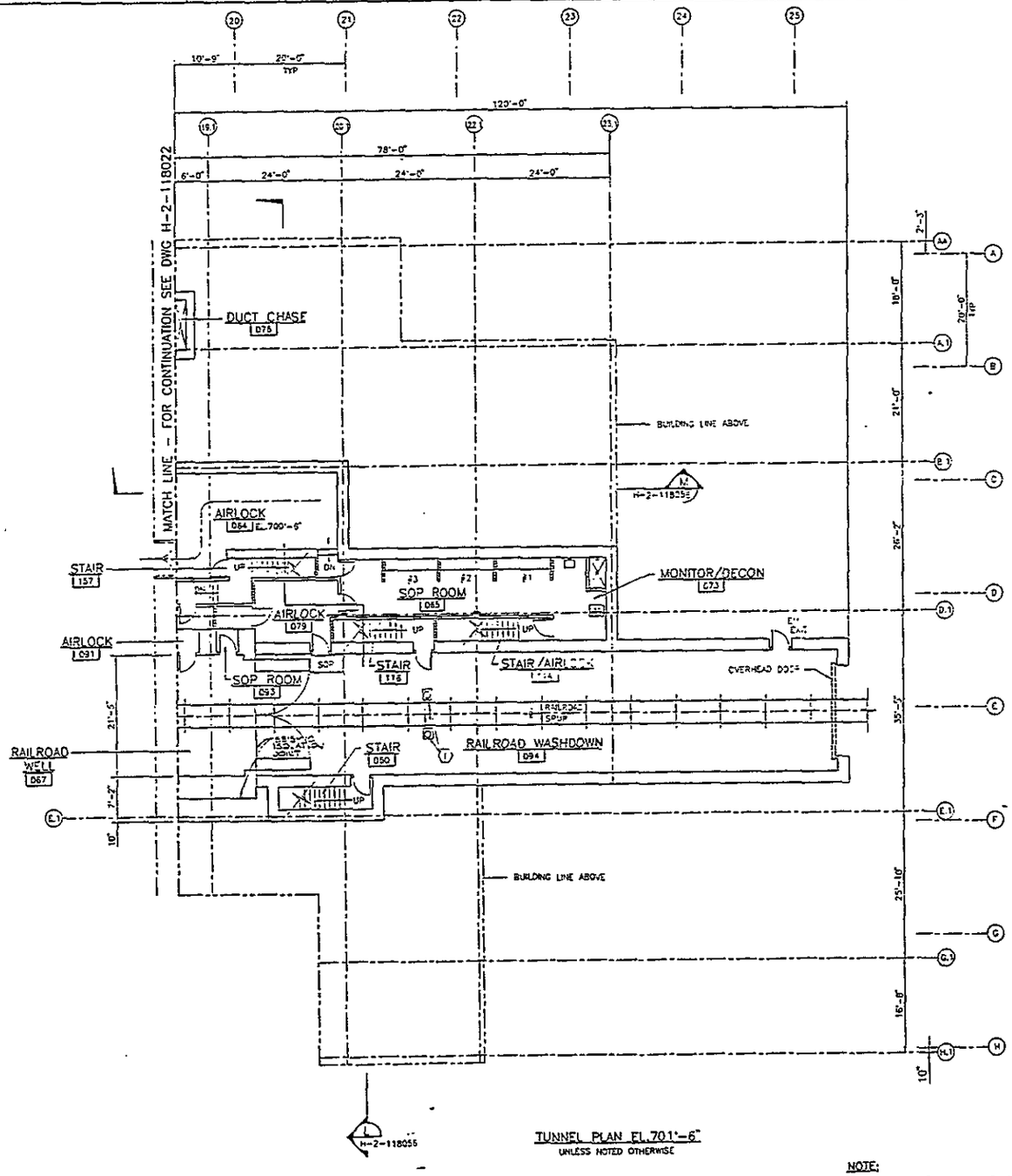
SHEET 1

| SIZE | CODE | DWG NO. | REV |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-118037 | 1 1 0 |

AUTOCAD

00218037
15 OCT 90
100 = 0%

9111210709 4




TUNNEL PLAN EL.701'-6"
UNLESS NOTED OTHERWISE

NOTE:
1. FOR NOTES SEE DRAWING H-2-117001.

EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | HEIGHT FEET | DESCRIPTION |
|---|---|---|---|
| 1 | [illegible] | — | RAILROAD WASHDOWN SUMP |

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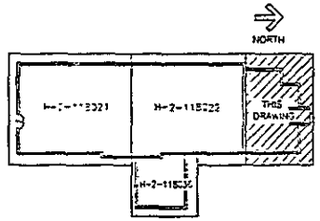
RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

| REV | DESCRIPTION | DRAWN | CHKD | APPROVED |
|---|---|---|---|---|
| G | [illegible] | [illegible] | [illegible] | [illegible] |
| 01 | REVISED TUNNEL AIRLOCKS TO CONC. | [illegible] | [illegible] | [illegible] |
| 00 | PER CR US. HNWP-0044 | [illegible] | [illegible] | [illegible] |
| 00 | RELEASED FOR DETAILED DESIGN | [illegible] | [illegible] | [illegible] |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE = ACON-EMPLOYEE

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
TUNNEL LEVEL FLOOR PLAN AT
SHIPPING AND RECEIVING AREAS

HANFORD WASTE VITRIFICATION PLANT

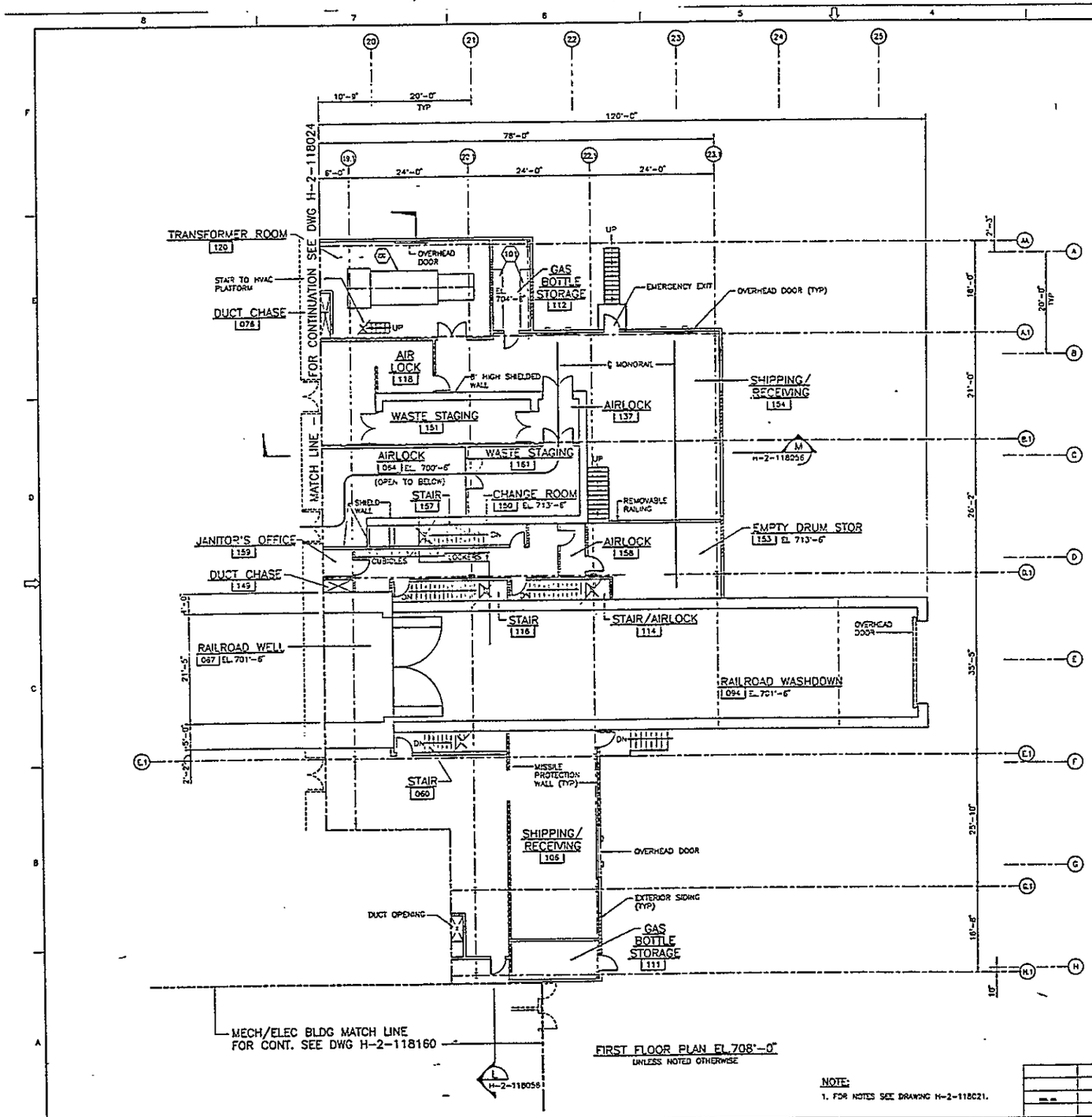
| | | | |
|---|---|---|---|
| B-595 | 845724 | | 3104 |
| 1/8"=1'-0" | 1 | | |

| NONE | NOT REQ'D | H-2-118038 | 1 | 1 | G |
|---|---|---|---|---|---|

AUTOCAD

E2118038
20 AUG 90
LED = EOF

9112117/03 1 E




FIRST FLOOR PLAN EL.708'-0"
UNLESS NOTED OTHERWISE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | HOOKUP FEET | DESCRIPTION |
|---|---|---|---|
| 100 | HLC-334-501 | 117'-10" | 13 BKV LOAD CENTER |
| 101 | - | - | BREATHING AIR TANK |

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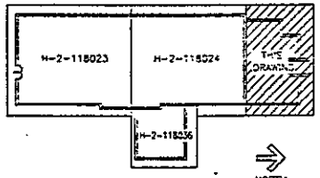
HOLD FOR RESOLUTION OF OTS COMMENTS ES: RELATED SHOP SUPPORT FOR CONC SHOP SUPPORT HOLD NO. HWVP-FO-22

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

| REV. | DATE | DESCRIPTION | DRAWN | CHECKED | ENGINEER | APPROVED |
|---|---|---|---|---|---|---|
| 0 | 10/25/90 | REVD EAST WALL @ RM 067. REVD WALLS & RELOCATED DOORS AT RM 136. MOVED REMOVABLE RAILING 7'-0" EAST AT RM 113A. ADDED SHIELD DOORS AT RM. 064. ADDED HOT DOORS AT SOUTH END OF BLDG. ADDED SLAB JOINT AT RM. 067. ADDED EQUIP 101 & RELOCATED DOOR TO EAST WALL AT RM 112. ADDED COLS @ RM 112,134, & 106. REVD DOORS @ RM 111. REVD WALLS & ADDED DUCT OPNG @ RM 106 & RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. HWVP-0450 | GCF | JRR | RPK | RMK |
| 01 | 9/21/90 | REVD WALLS IN RM 064 TO CONC PER CR NO. HWVP-0441. | JLS | FGB | OPC | RNG |
| 00 | 4/27/90 | RELEASED FOR DETAILED DESIGN | GCF | CHK | RPK | RMK |
| | | | JLS | FGB | OPC | RNG |

ENGINEERING RELEASE
REV. _____ DATE _____
ENG. _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
FIRST FLOOR PLAN AT
SHIPPING AND RECEIVING AREAS

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| P. GIBBONS | 10/1/90 | |
| O. CHAWLA | 10/1/90 | |
| F. BROOKS | 10/1/90 | |
| J. SMITS | 10/1/90 | |
| J. KEENAN | 10/1/90 | |
| S. KUMAR | 10/01/90 | |
| S. KULANOFF | 10/01/90 | |
| M. VELGARES | 10/01/90 | |
| G. FELDEN | 10/01/90 | |

| | | | |
|---|---|---|---|
| SCALE | 1/8" = 1'-0" | DWG. NO. 1 | REV. NO. |
| PROJECT NO. B-595 | PLANT SYSTEM NO. 845724 | DATE 3/04 | |

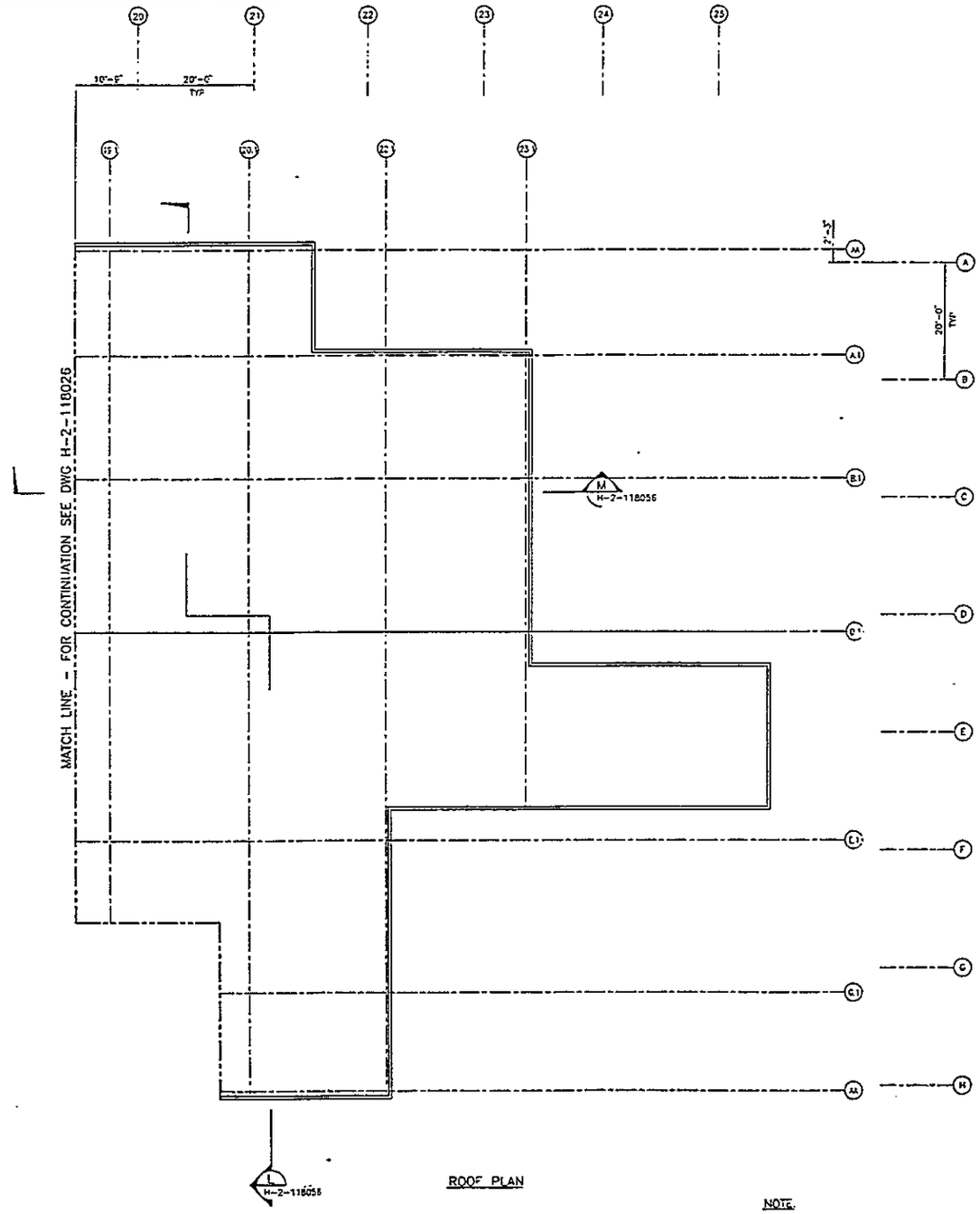
NONE | NOT REQ'D | H-2-118039 | 1 | 1 | 0

AUTOCAD 1

GC218039
19 OCT 90
LCO = V.K.

REDUCED PRINT SCALE 0 5 10 15 20

9112170932



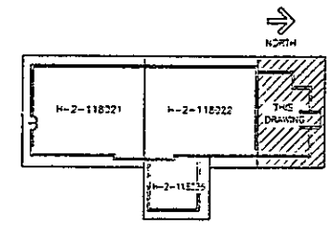

ROOF PLAN

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

| REV | | REVISION DESCRIPTION | APPROVAL DETAILS |
|---|---|---|---|
| 0 | 10/26/90 | RELEASE FOR PROJECT BASELINE CONTROL. SEE DCN NO. 3104 FOR DETAILS | |
| 00 | 7/30/90 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV. ____ DATE ____
DCN

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
ROOF PLAN AT
SHIPPING AND RECEIVING AREAS

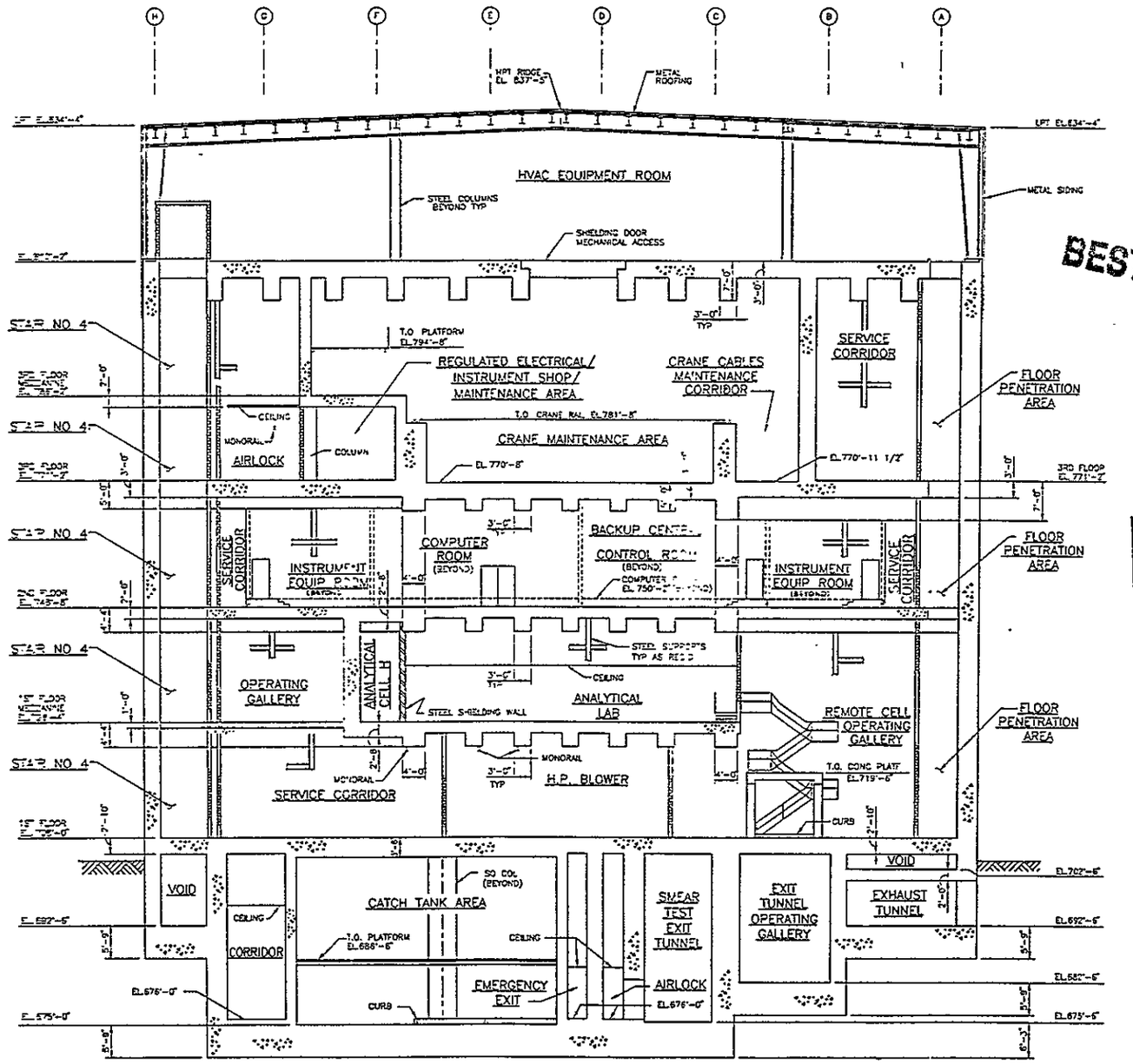
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| DWG NO. B-595 | 1 | 845724 | 3104 |
| SCALE 1/8"=1'-0" | | SHEET 1 | |

NONE | NOT REQ'D | H-2-118040 | 1 | 1 | -0

AUTOCAD 1 EE218040

9112170097




SECTION A

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | |
|---|---|---|---|
| 0 | REVISED FOR SLAB THICKNESS & 1ST FLR MECHANIC AND 2ND FLOOR ADDED INSTRUMENT EQUIP ROOMS AND REVISED THE INTERIOR BARRIER CONTROL FOR RA AND HAZARDS | | |
| 00 | RELEASED FOR DETAILED DESIGN | SZG | RPK / RMK |
| | | JLS | FGB / OPC / RNG |

ENGINEERING RELEASE
REV ____ DATE ____
DRG

| | |
|---|---|
| R GIBBONS | 10/3/90 |
| O CHAWLA | 9/3/90 |
| F BROOKS | 9/3/90 |
| J SMETS | 9/4/90 |
| R KEENAN | 9/4/90 |
| R KUMAR | 9/25/90 |
| G KURLANOFF | 9/25/90 |
| J GOODE | 9/21/90 |
| S GAXIOLA | 9/21/90 |

U.S.DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

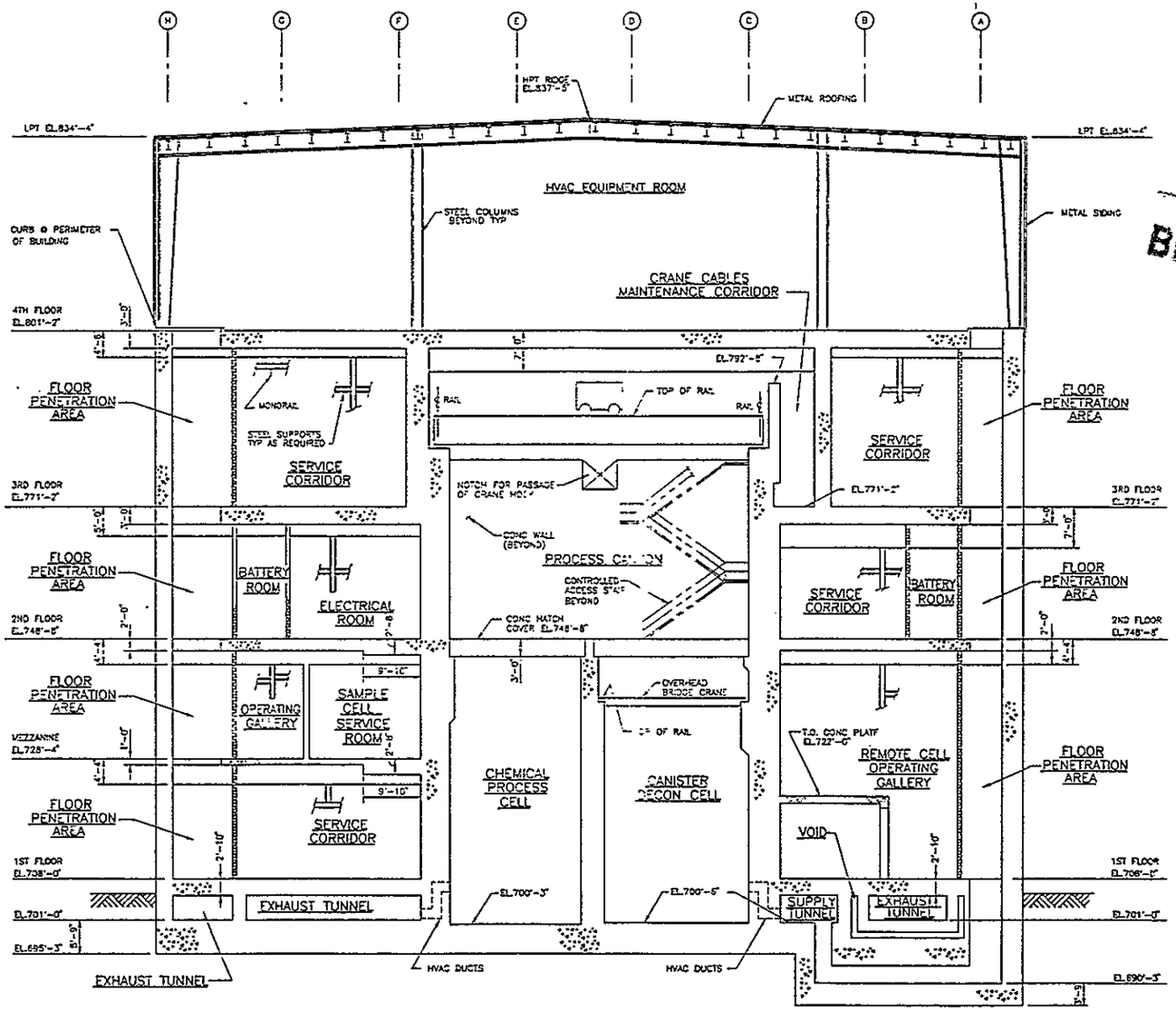
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SECTION A

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 843724 | 310A | |
| 1/8" = 1'-0" | 1 | | |
| NONE | NOT REQ'D | H-2-118041 | 1 / 1 |

AUTOCAD

9112170903


HPT RIDGE EL.837'-5"
METAL ROOFING
LPT EL.834'-4"
HVAC EQUIPMENT ROOM
STEEL COLUMNS BEYOND TYP
METAL SIDING
CURB @ PERIMETER OF BUILDING
CRANE CABLES MAINTENANCE CORRIDOR
4TH FLOOR EL.801'-2"
EL.792'-5"
TOP OF RAIL
RAIL
MONORAIL
STEEL SUPPORTS TYP AS REQUIRED
SERVICE CORRIDOR
FLOOR PENETRATION AREA
3RD FLOOR EL.771'-2"
EL.771'-2"
NOTCH FOR PASSAGE OF CRANE HOOK
CONC WALL (BEYOND)
PROCESS CELL
CONTROLLED ACCESS STAIR BEYOND
BATTERY ROOM
ELECTRICAL ROOM
2ND FLOOR EL.748'-8"
CONC HATCH COVER EL.748'-8"
OPERATING GALLERY
SAMPLE CELL SERVICE ROOM
MEZZANINE EL.728'-4"
OVERHEAD BRIDGE CRANE
CHEMICAL PROCESS CELL
CANISTER DECON CELL
T.O. CONC PLATF EL.722'-0"
REMOTE CELL OPERATING GALLERY
VOID
1ST FLOOR EL.708'-0"
EL.700'-3"
EL.700'-5"
EXHAUST TUNNEL
SUPPLY TUNNEL
EL.701'-0"
EL.695'-3"
EL.690'-3"
HVAC DUCTS
SECTION B
0 5 10 15 20
REDUCED PRINT SCALE
NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
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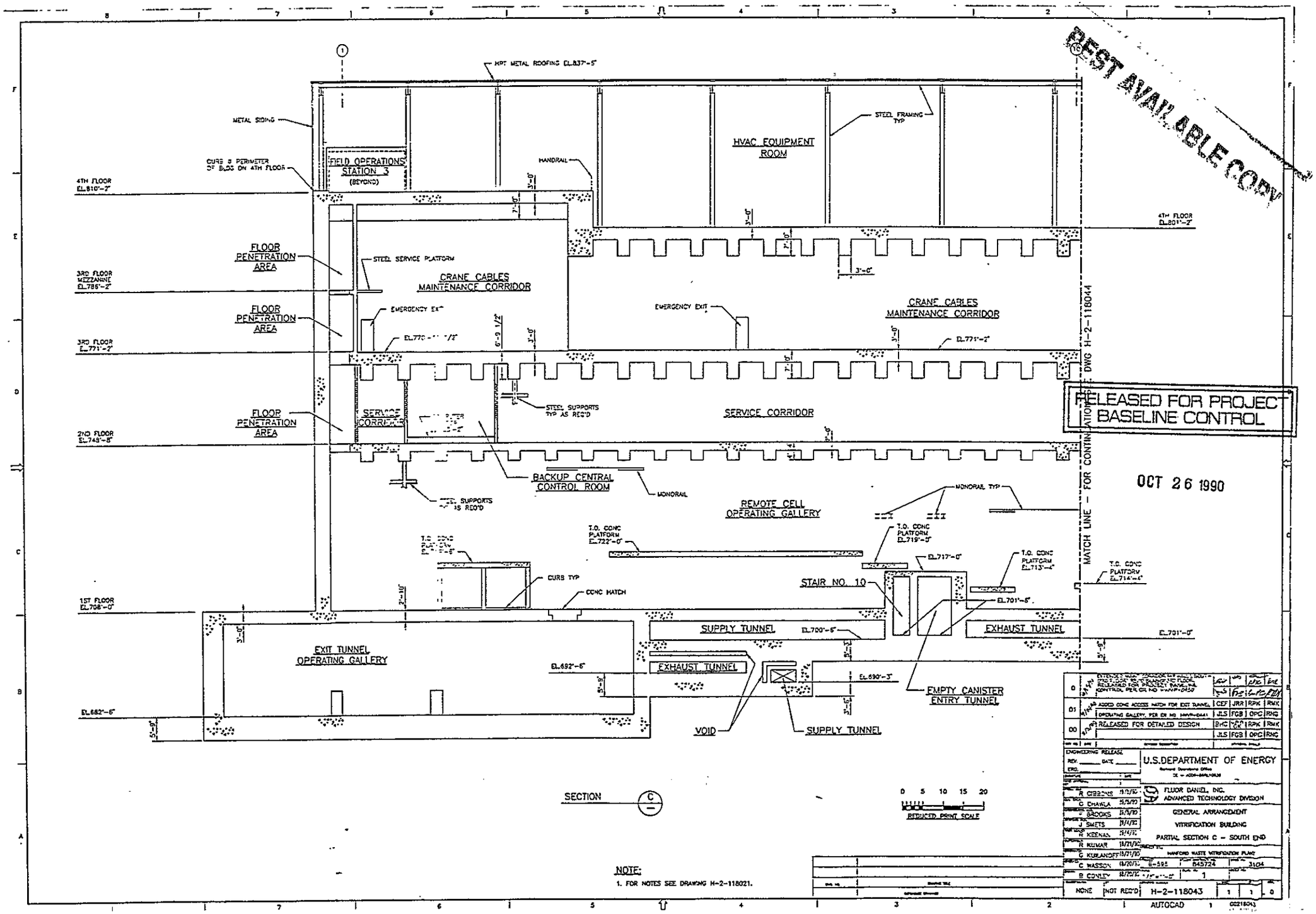
U.S.DEPARTMENT OF ENERGY
FLUOR DANIEL, INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SECTION B
HANFORD WASTE VITRIFICATION PLANT
RELEASED FOR DETAILED DESIGN
H-2-118042

9112170609


HPT METAL ROOFING EL.837'-5"
METAL SIDING
CURB @ PERIMETER OF BLDG ON 4TH FLOOR
FIELD OPERATIONS STATION 3 (BEYOND)
HANDRAIL
HVAC EQUIPMENT ROOM
STEEL FRAMING TYP
4TH FLOOR EL.810'-2"
4TH FLOOR EL.801'-2"
FLOOR PENETRATION AREA
STEEL SERVICE PLATFORM
CRANE CABLES MAINTENANCE CORRIDOR
3RD FLOOR MEZZANINE EL.785'-2"
EMERGENCY EXIT
3RD FLOOR EL.771'-2"
EL.771'-2"
SERVICE CORRIDOR
STEEL SUPPORTS TYP AS REQ'D
2ND FLOOR EL.743'-8"
BACKUP CENTRAL CONTROL ROOM
MONORAIL
REMOTE CELL OPERATING GALLERY
MONORAIL TYP
T.O. CONC PLATFORM EL.722'-0"
T.O. CONC PLATFORM EL.719'-0"
EL.717'-0"
T.O. CONC PLATFORM EL.713'-4"
T.O. CONC PLATFORM EL.714'-4"
CURB TYP
CONC HATCH
STAIR NO. 10
EL.701'-8"
1ST FLOOR EL.708'-0"
SUPPLY TUNNEL
EL.700'-6"
EXHAUST TUNNEL
EL.701'-0"
EXIT TUNNEL OPERATING GALLERY
EL.692'-6"
EL.690'-3"
EMPTY CANISTER ENTRY TUNNEL
VOID
EL.682'-6"
MATCH LINE - FOR CONTINUATION SEE DWG H-2-118044
SECTION C
0 5 10 15 20
REDUCED PRINT SCALE
NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
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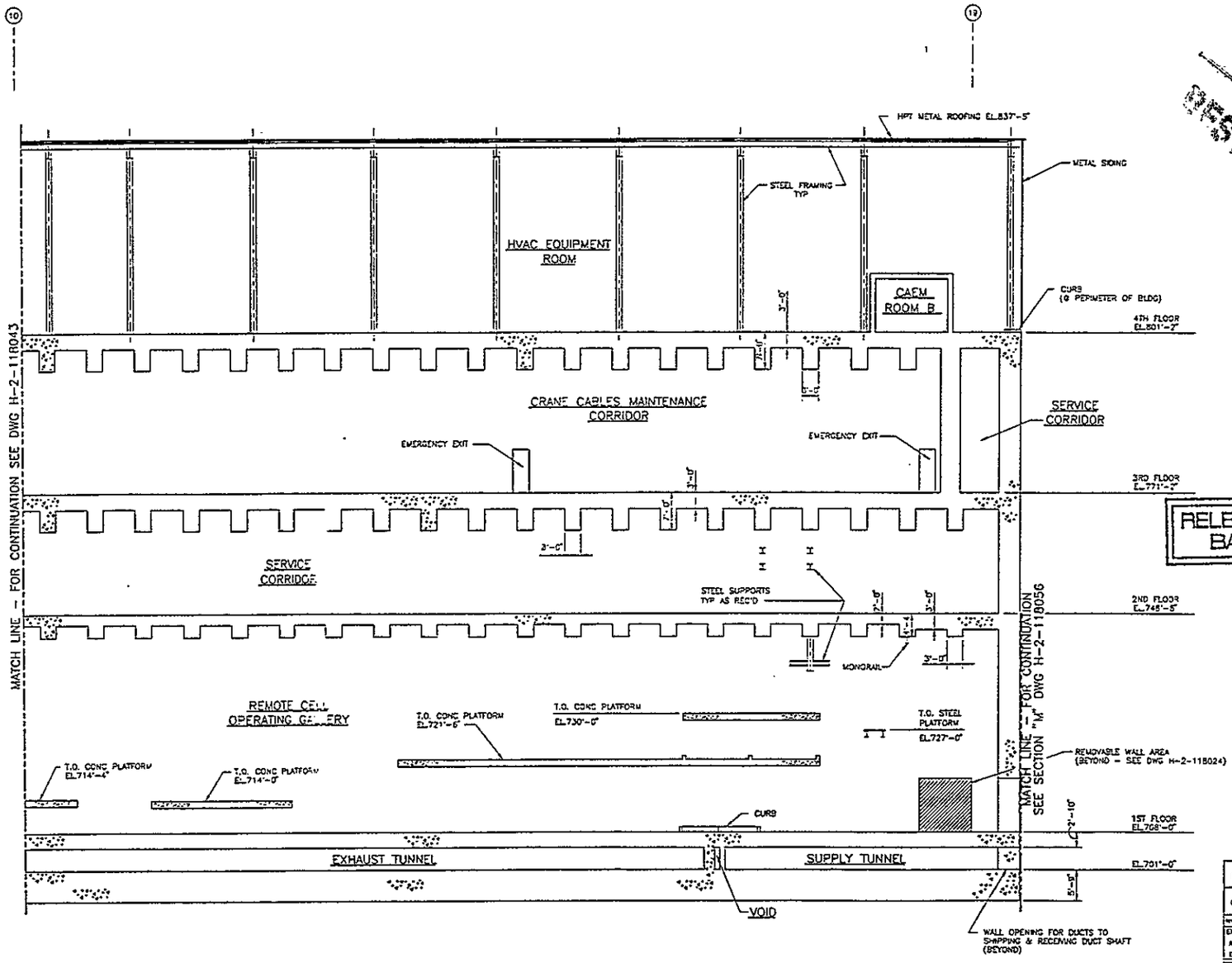
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL, INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION C - SOUTH END
HANFORD WASTE VITRIFICATION PLANT
RELEASED FOR DETAILED DESIGN
ADDED CONC ACCESS HATCH FOR EXIT TUNNEL
OPERATING GALLERY, PER CR NO
R GIBBONS
C CHAWLA
J SMETS
R KEENAN
R KUMAR
G KURLANOFF
C WASSON
B CONLEY
H-2-118043
AUTOCAD

9112160711




BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

SECTION C

NOTE:

1. FOR NOTES SEE DRAWING H-2-118021.

REDUCED PRINT SCALE

| | | | | |
|---|---|---|---|---|
| D | ADDED CAEM ROOM B (11'-7 1/2) ADDED FILL SPACE FOR DUCTS TO S-1-35 / M-1-10 REVISED PER PROJECT BASELINE CONTROL FOR CR NUMBER-0150 | | | |
| 00 | RELEASED FOR DETAILED DESIGN | BHC | RPK | RMK |
| | | JLS | FDB | OPC | RNG |

ENGINEERING RELEASE
REV. ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
EE - ACSM-SSELVILLE

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | |
|---|---|
| R. GIBBONS | 9/3/90 |
| D. CHAWLA | 9/3/90 |
| J. BROOKS | 9/5/90 |
| J. SMETS | 9/4/90 |
| J. KEENAN | 9/4/90 |
| P. KUMAR | 9/21/90 |
| J. KULANOFF | 9/21/90 |
| C. WASSON | 9/20/90 |
| S. CONLEY | 9/20/90 |

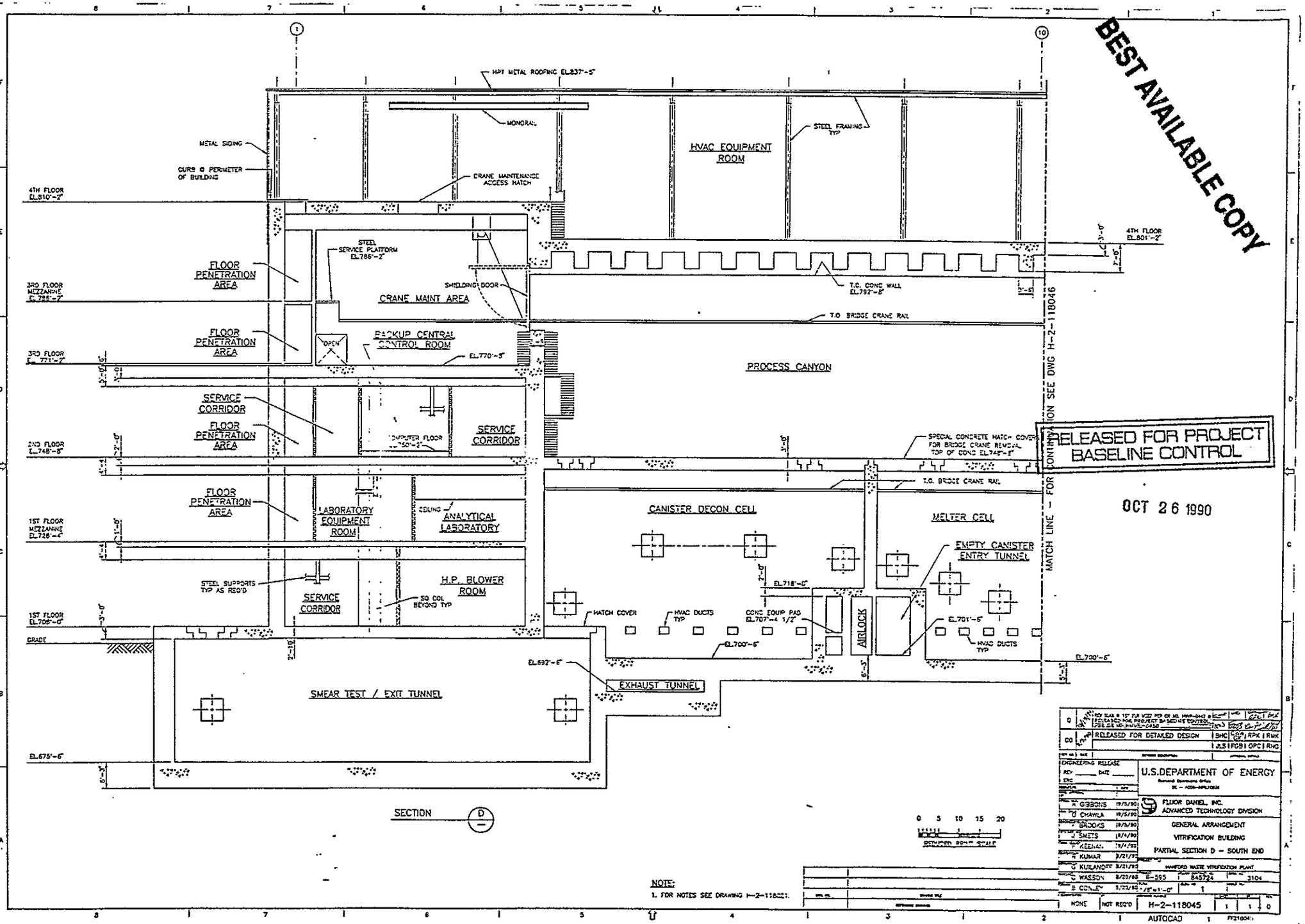
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION C - NORTH END

HANFORD WASTE VITRIFICATION PLANT

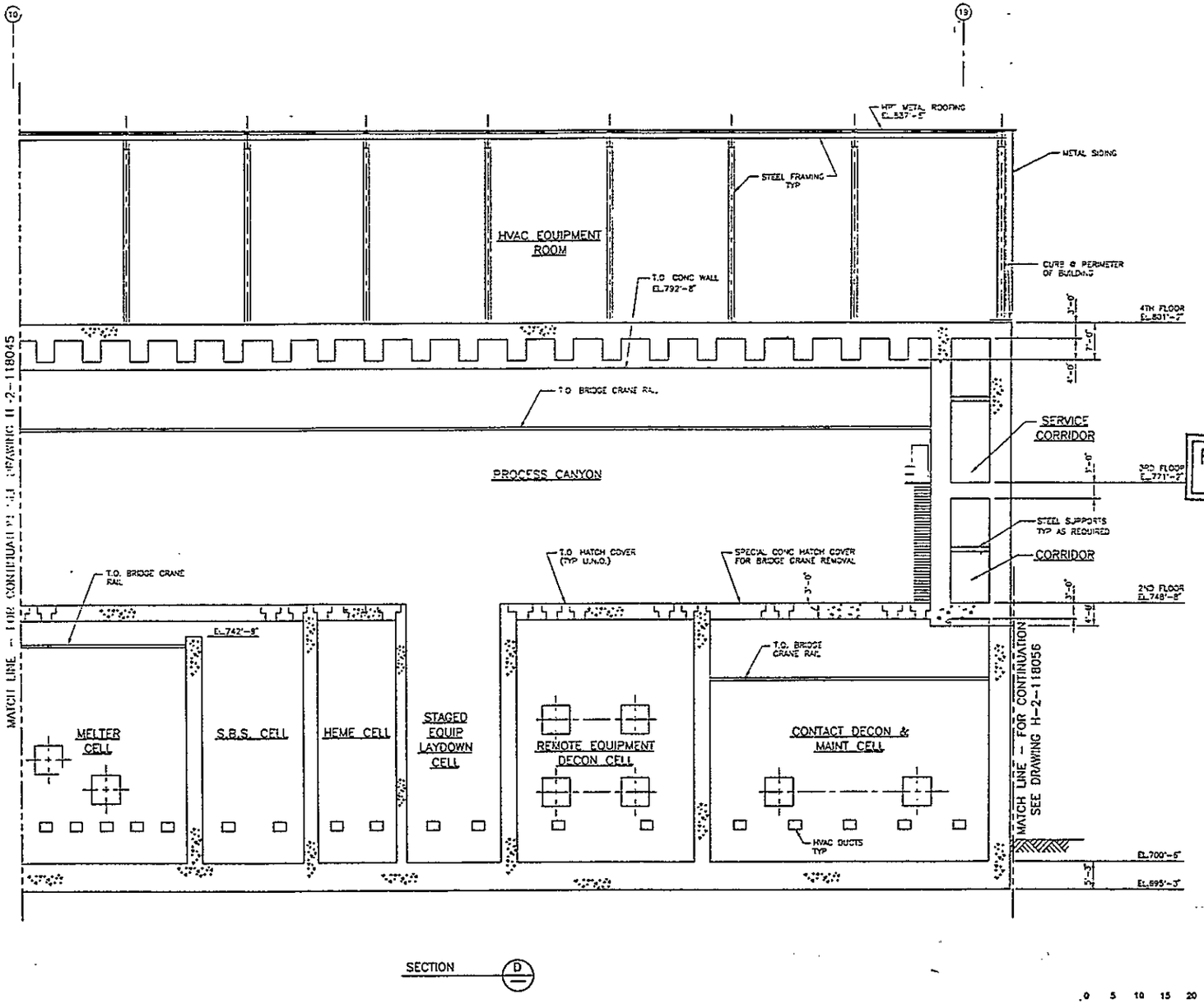
| | | | |
|---|---|---|---|
| B-595 | 845724 | 3104 | |
| 1/8" = 1'-0" | 1 | | |
| NONE | NOT REQ'D | H-2-118044 | 1 / 1 / 0 |

AUTOCAD 1 F7218044 10 OCT 90

9112170931


BEST AVAILABLE COPY
HPT METAL ROOFING EL.837'-5"
MONORAIL
STEEL FRAMING TYP
HVAC EQUIPMENT ROOM
METAL SIDING
CURB @ PERIMETER OF BUILDING
CRANE MAINTENANCE ACCESS HATCH
4TH FLOOR EL.810'-2"
4TH FLOOR EL.801'-2"
STEEL SERVICE PLATFORM EL.786'-2"
FLOOR PENETRATION AREA
3RD FLOOR MEZZANINE EL.785'-2"
SHIELDING DOOR
CRANE MAINT AREA
T.O. CONC WALL EL.792'-8"
T.O. BRIDGE CRANE RAIL
FLOOR PENETRATION AREA
3RD FLOOR EL.771'-2"
OPEN
BACKUP CENTRAL CONTROL ROOM
EL.770'-5"
PROCESS CANYON
SERVICE CORRIDOR
FLOOR PENETRATION AREA
COMPUTER FLOOR EL.750'-2"
SERVICE CORRIDOR
2ND FLOOR EL.748'-8"
SPECIAL CONCRETE HATCH COVER FOR BRIDGE CRANE REMOVAL TOP OF CONC EL.748'-8"
T.O. BRIDGE CRANE RAIL
FLOOR PENETRATION AREA
LABORATORY EQUIPMENT ROOM
CEILING
ANALYTICAL LABORATORY
CANISTER DECON CELL
MELTER CELL
1ST FLOOR MEZZANINE EL.728'-4"
EMPTY CANISTER ENTRY TUNNEL
STEEL SUPPORTS TYP AS REQ'D
SERVICE CORRIDOR
SS COL BEYOND TYP
H.P. BLOWER ROOM
EL.718'-0"
1ST FLOOR EL.708'-0"
HATCH COVER
HVAC DUCTS TYP
CONC EQUIP PAD EL.707'-4 1/2"
AIRLOCK
EL.701'-6"
HVAC DUCTS TYP
GRADE
EL.700'-6"
EL.700'-6"
EL.697'-6"
EXHAUST TUNNEL
SMEAR TEST / EXIT TUNNEL
EL.675'-6"
SECTION D
0 5 10 15 20
REDUCED SCALE SCALE
MATCH LINE - FOR CONTINUATION SEE DWG H-2-118046
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
RELEASED FOR DETAILED DESIGN
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL, INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION D - SOUTH END
HANFORD WASTE VITRIFICATION PLANT
H-2-118045
NOTE:
1. FOR NOTES SEE DRAWING H-2-118031.

9112170372

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NOTE:
1. FOR NOTES SEE DRAWING H-2-112221.

| | | |
|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. HNVP-2450 | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
CHG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE – 3024–0001/0001

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION D–NORTH END

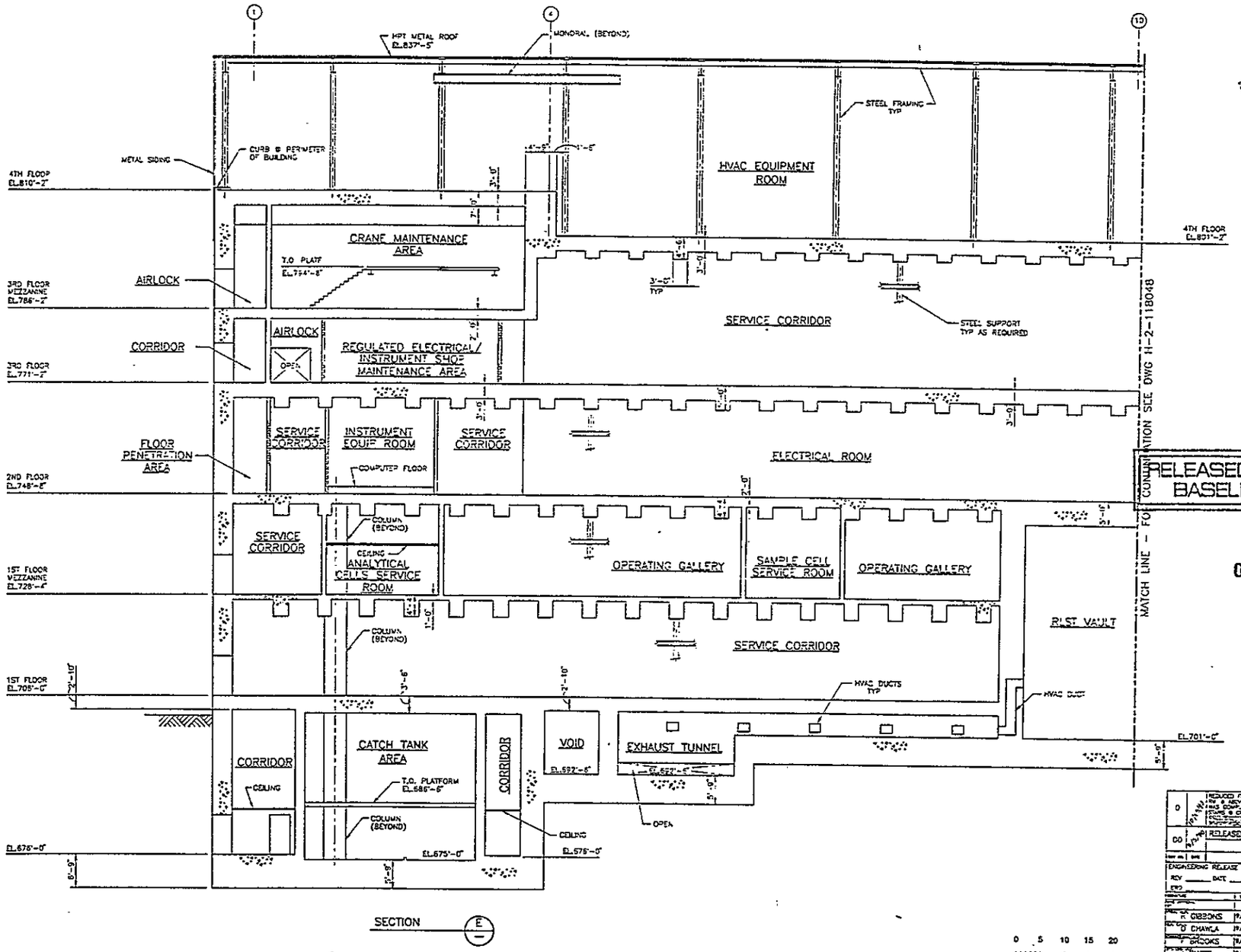
HANFORD WASTE VITRIFICATION PLANT

B-595 | 843724 | 3104
1/8"=1'-0" | 1

NONE | NOT REQ'D | H-2-118046 | 1 | 1 | 0

AUTOCAD 1 E2218046 17 AUG 90

9111217093




NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | |
|---|---|---|---|---|
| D | REDUCED FLOOR SLAB THICKNESS ABOVE ELECT. RM. & ABOVE SERVICE CORRIDOR. NOTE EQUIP. RM. HAS EQUIP. TYP. ROOM. ADDED N.A.'S & DELETED STAIRS @ CRANE MAINT. PER CHANGE NOTICE | | | |
| CO | RELEASED FOR DETAILED DESIGN | BHC | RPK | RMK |
| | | JLS | FGB | OPC |

ENGINEERING RELEASE
RDY ____ DATE ____
EDD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION E – SOUTH END

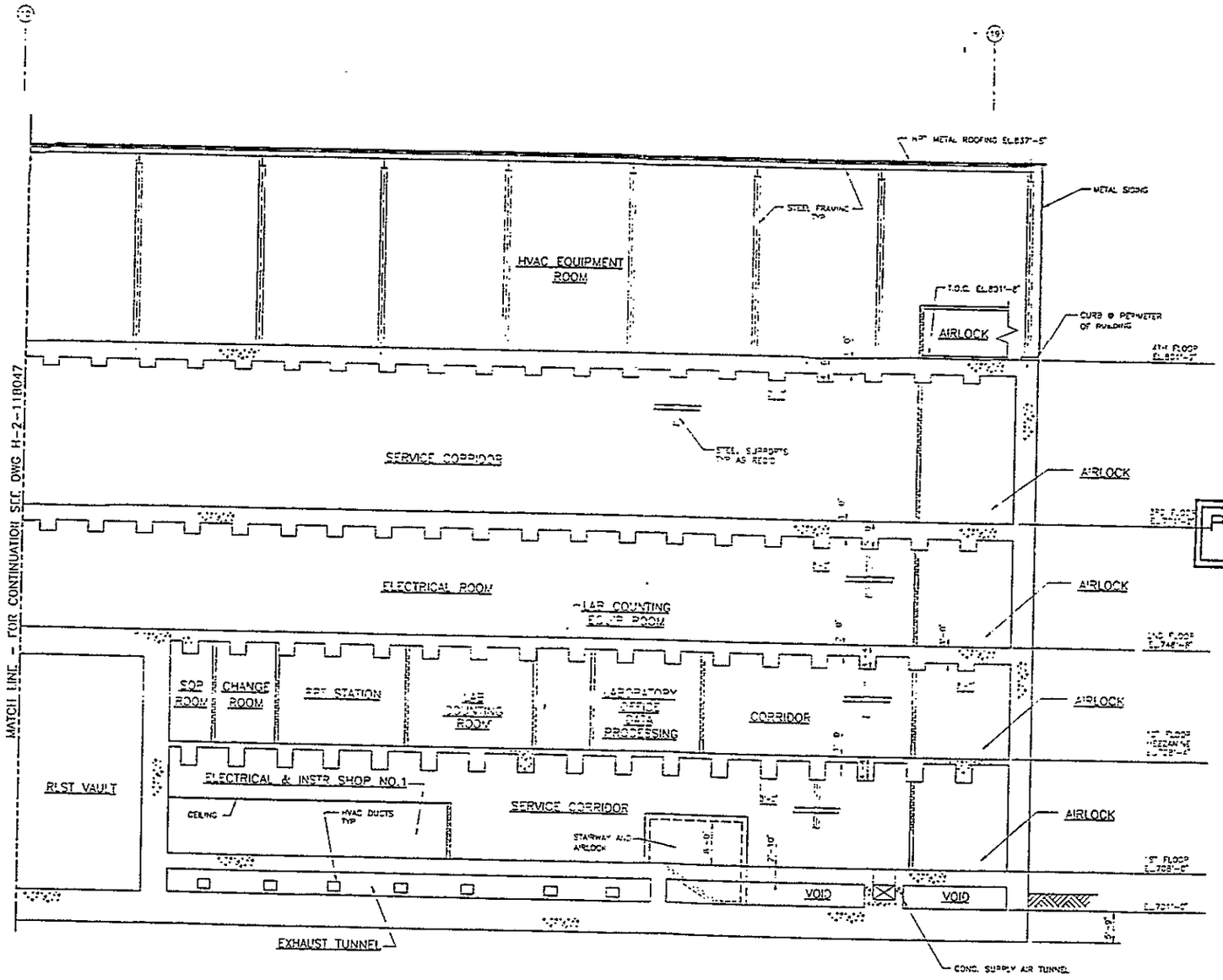
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| R GIBBONS | 9/3/90 | | |
| D CHAWLA | 9/3/90 | | |
| P BROOKS | 9/5/90 | | |
| J SMETS | 9/4/90 | | |
| A KEENAN | 9/4/90 | | |
| P KUMAR | 9/21/90 | | |
| G KURLANOFF | 9/21/90 | | |
| C WASSON | 9/20/90 | B-595 | 845724 | 3104 |
| B CONLEY | 9/20/90 | 1/8"=1'-0" | 1 | |

NONE | NOT REQ'D | H-2-118047 | 1 | 1 | 0

AUTOCAD 1 FF218047

9112170274




SECTION E

NOTE:
- FOR NOTES SEE DRAWING H-2-118021

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

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RELEASED FOR DETAILED DESIGN

ENGINEERING RELEASE

U.S. DEPARTMENT OF ENERGY

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

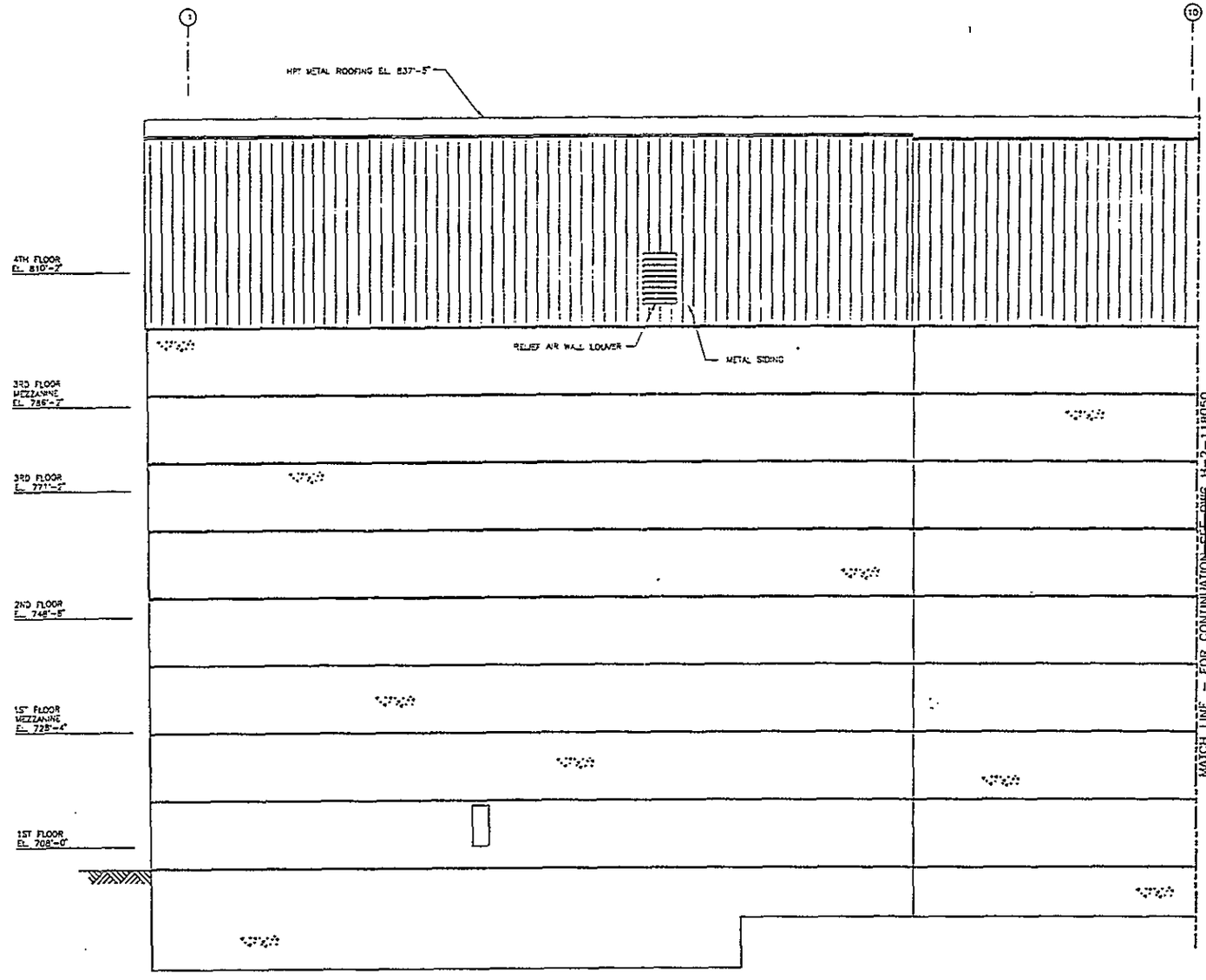
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
PARTIAL SECTION E - NORTH END

HANFORD WASTE VITRIFICATION PLANT

R. GIBBONS
O. CHAWLA
F. BROOKS
J. SMETS
J. KEENAN
P. KUMAR
G. KUPLANOFF
C. WASSON
B. COOLEY

NONE | NOT REQ'D | H-2-118048

9111211709 75




EAST ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

0 5 10 15 20
REDUCED PRINT SCALE

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DESCRIPTION | DATE |
|---|---|---|
| 0 | RELEASED FOR DETAILED DESIGN | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
CKD ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
EAST ELEVATION - SOUTH END

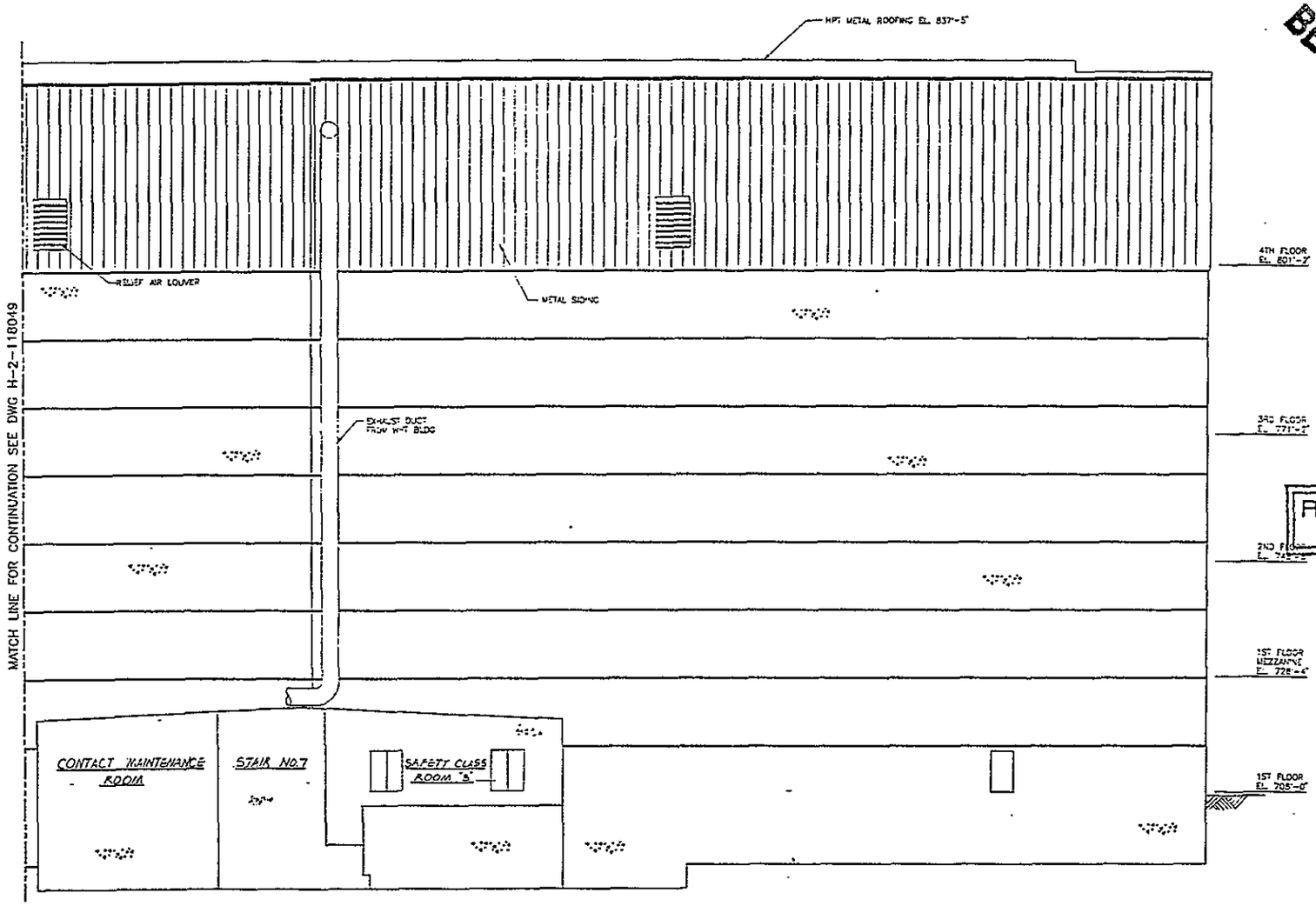
HANFORD WASTE VITRIFICATION PLANT

B-595 | 845724 | 3104
1/8" = 1'-0" | 1

NONE | NOT REQ'D | H-2-118049 | 1 | 1 | 0

AUTOCAD 1 EE218049

9112170116




BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

EAST ELEVATION

NOTE:

1. FOR NOTES SEE DRAWING H-2-118021.

0 5 10 15 20

REDUCED PRINT SCALE

| | | | |
|---|---|---|---|
| 0 | 10/26/90 | ADDED STAIR NO.7, SAFETY CLASS ELEVATION "B" RELEASED FOR PROJECT BASELINE CONTROL. PER CR 90-0450 | |
| 00 | 4/6/90 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
CCO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RL — ADMINISTRATOR

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
EAST ELEVATION — NORTH END

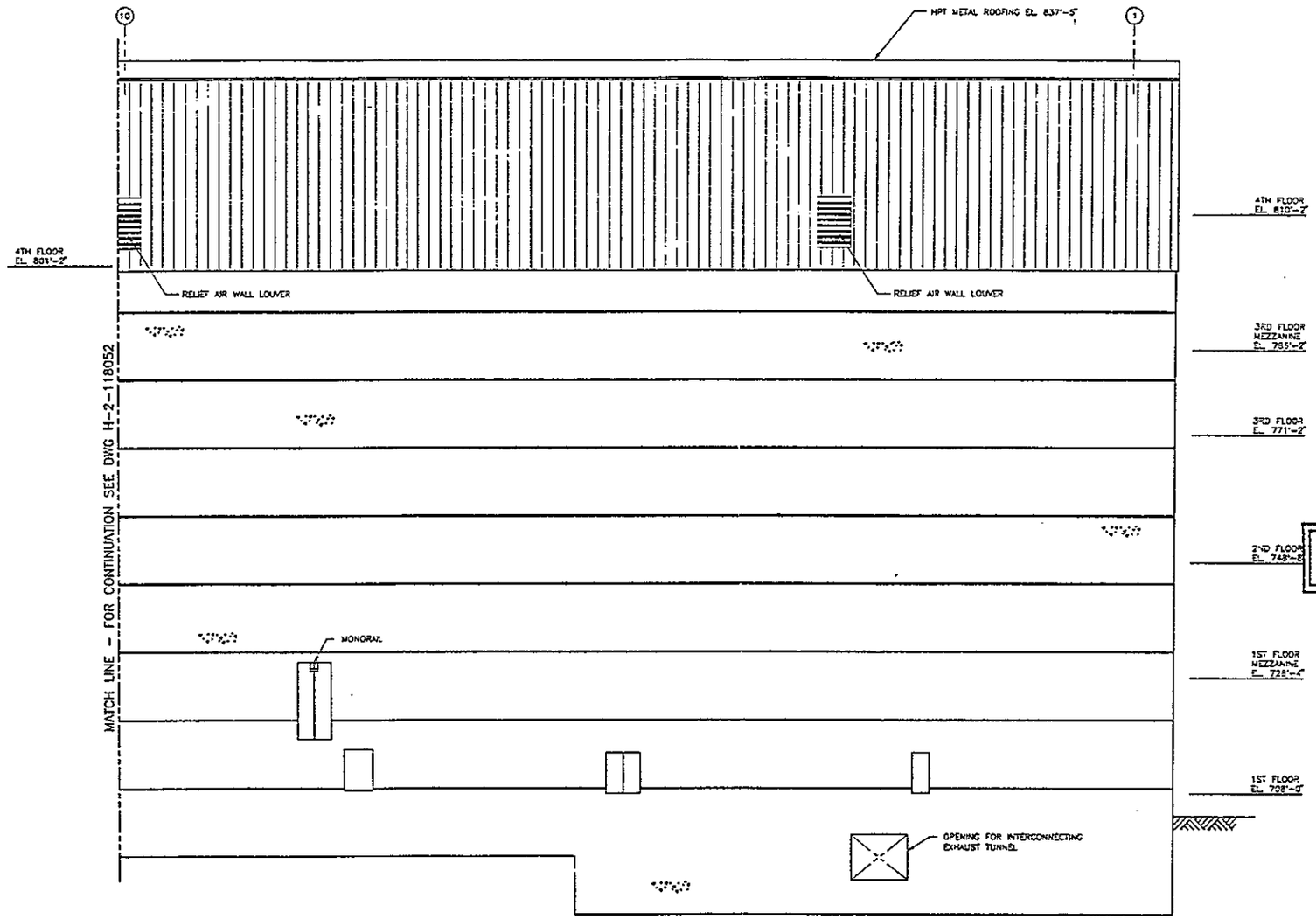
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3104 | |
| 1 | | | |

NONE | NOT REQ'D | H-2-118050 | 1 | 1 | 0

AUTOCAD 1 EE218050

9112172017




WEST ELEVATION

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV. | DATE | REVISION DESCRIPTION | APPROVAL |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE / RECONTROL PER CR. NO. HWVP-0450 | |
| 00 | 10/19/90 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV _____ DATE _____
ECO _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
WEST ELEVATION - SOUTH END

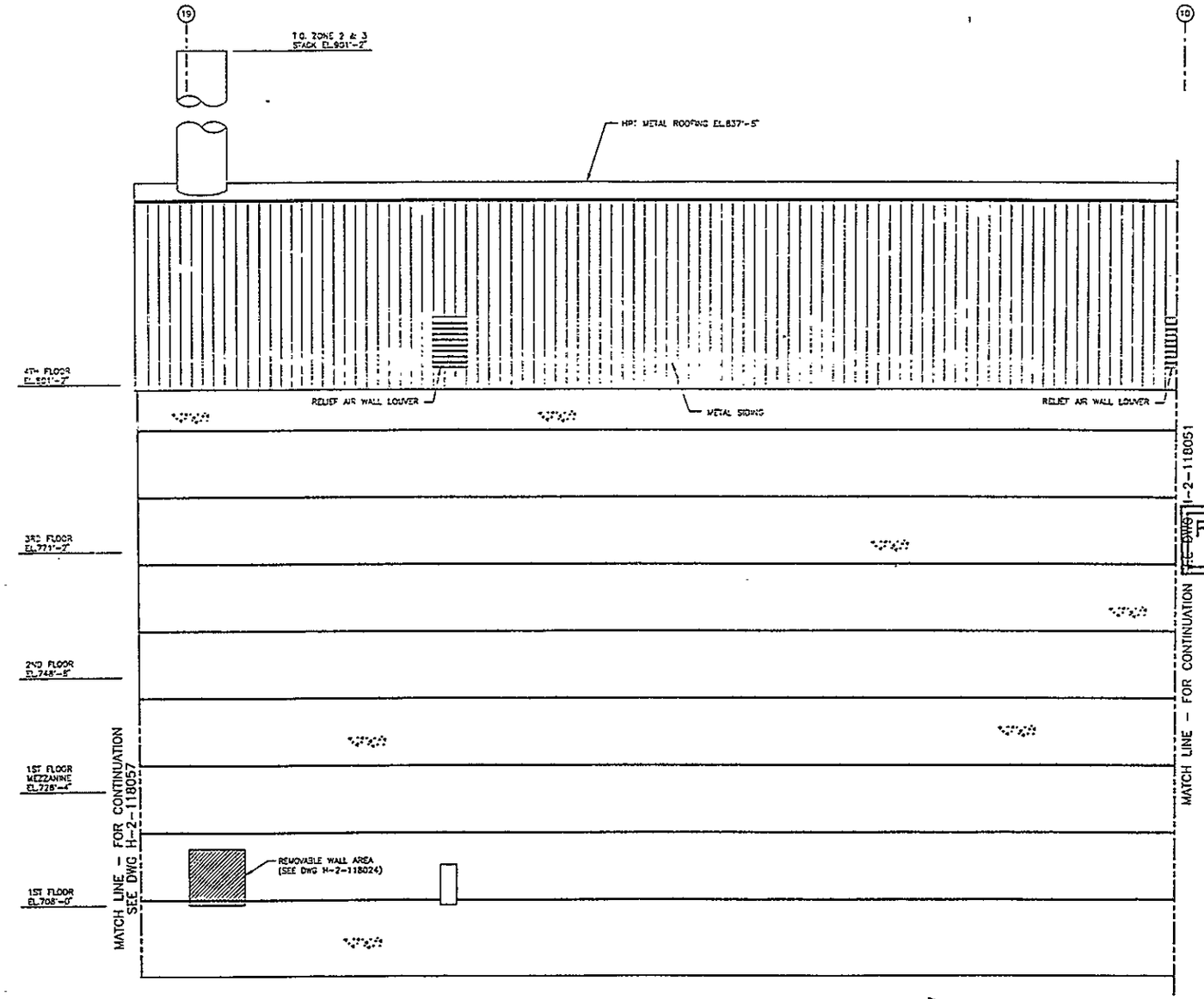
HANFORD WASTE VITRIFICATION PLANT

E-595 | 845724 | 3104
10-30-90 | 1/16" = 1'-0" | 1

NONE | NOT REQ'D | H-2-118051 | 1 | 1 | 0

AUTOCAD 1 (1218051)

9112170315




WEST ELEVATION

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | | REVISION DESCRIPTION |
|---|---|---|
| 0 | | RELEASED FOR PROJECT BASELINE |
| | | CONTROL PER CR No. WHPR-0850 |
| 00 | | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

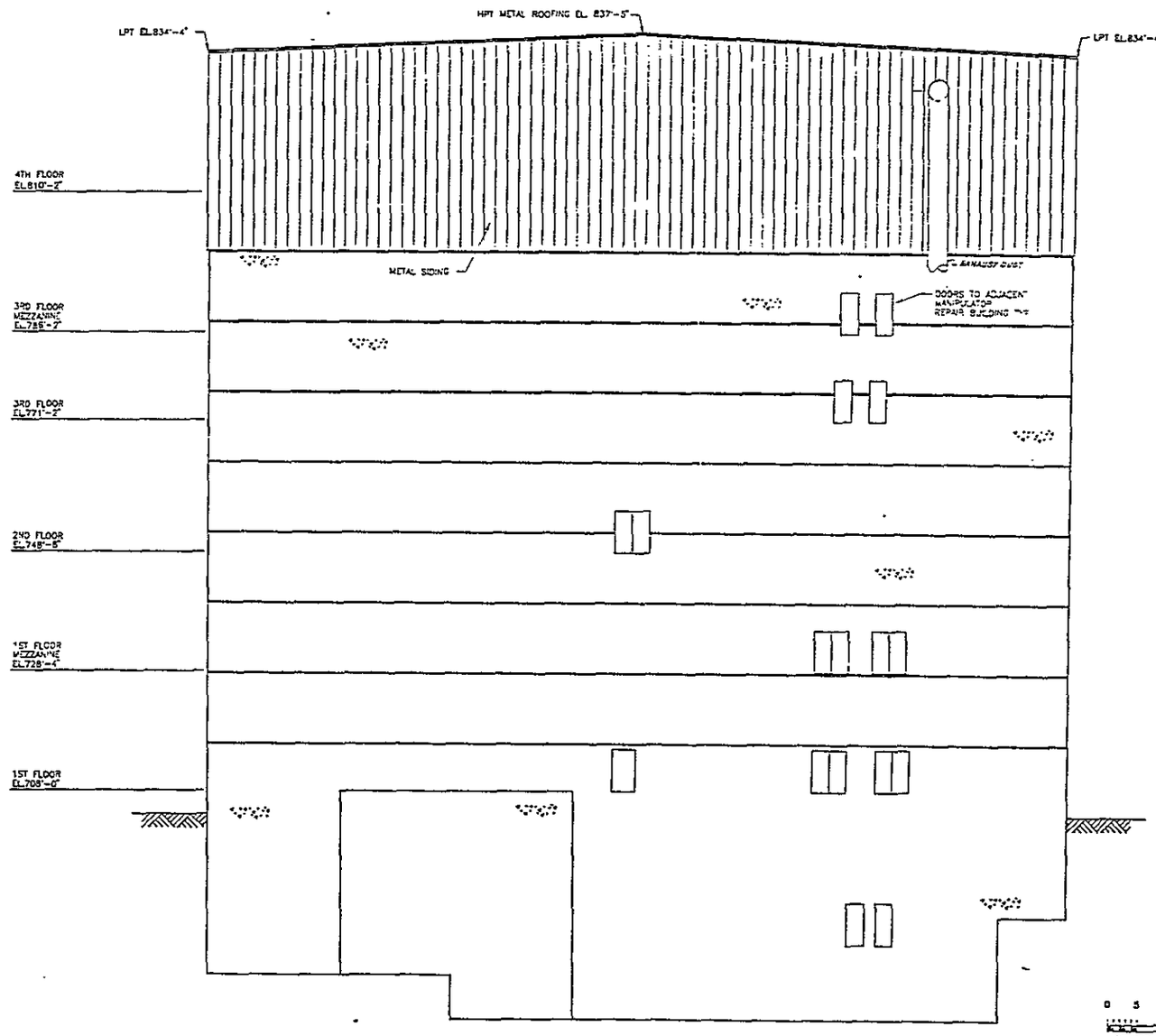
GENERAL ARRANGEMENT
VITRIFICATION BUILDING
WEST ELEVATION - NORTH END

HANFORD WASTE VITRIFICATION PLANT

B-595 | 845724 | 3104
1/8"=1'-0" | 1

NONE | NOT REQ'D | H-2-118052 | 1 | 1 | 0

AUTOCAD 1 E2118052




SOUTH ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | |
|---|---|---|
| 0 | MOVED EXHAUST DUCT AND RELEASED FOR PROJECT BASELINE CONTROL PER CR 90-1119 APPROVED | |
| DO | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
NO. ____ DATE ____
DIS

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL01830

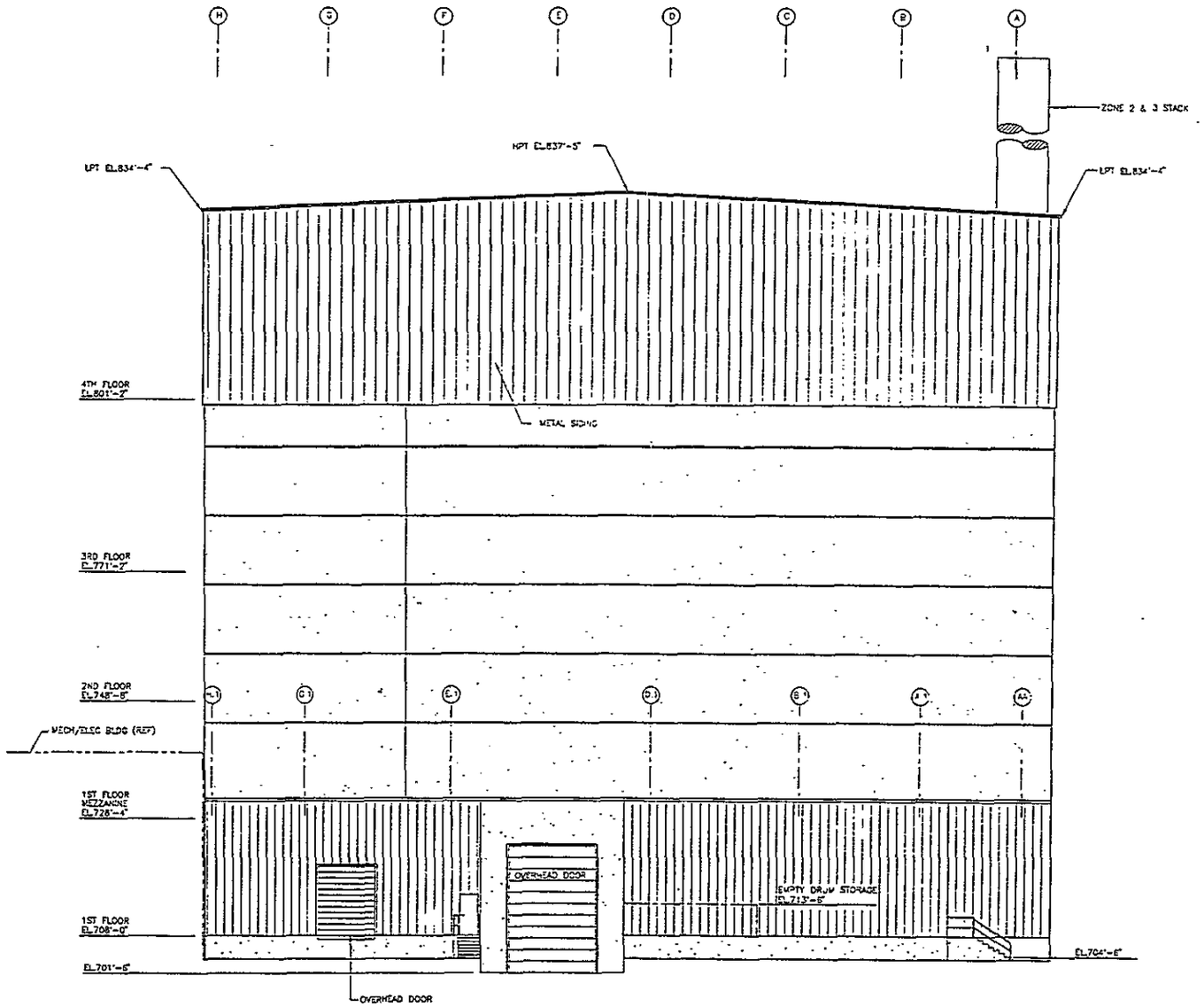
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SOUTH ELEVATION

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 845724 | 3104 | |
| 1/8"=1'-0" | 1 | | |
| NONE | NOT REQ'D | H-2-118053 | 1 1 0 |

9111214116




NORTH ELEVATION

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | | | | |
|---|---|---|---|---|---|---|
| 0 | 10/5/90 | ADDED GAS BOTTLE STORAGE AREA, REVISED METAL SIDING AT 1ST FLOOR, RELEASED FOR PROJECT BASELINE CONTROL, PER CCN 8-AMVR-0850 | | | | |
| 00 | 8/23/90 | RELEASED FOR DETAILED DESIGN | GCF | CK | RPK | RMK |
| | | | | JLS | FGB | DPC |

ENGINEERING RELEASE
REV ____ DATE ____
PRO ____

| | |
|---|---|
| R GIBBONS | 10/3/90 |
| O CHAWLA | 10/3/90 |
| F BROOKS | 10/3/90 |
| J SMETS | 10/4/90 |
| R KEENAN | 10/4/90 |
| R KUMAR | 10/22/90 |
| G KURANOFF | 10/26/90 |
| H MELGARES | 10/31/90 |
| G FIELDEN | 10/31/90 |

U.S.DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
NORTH ELEVATION

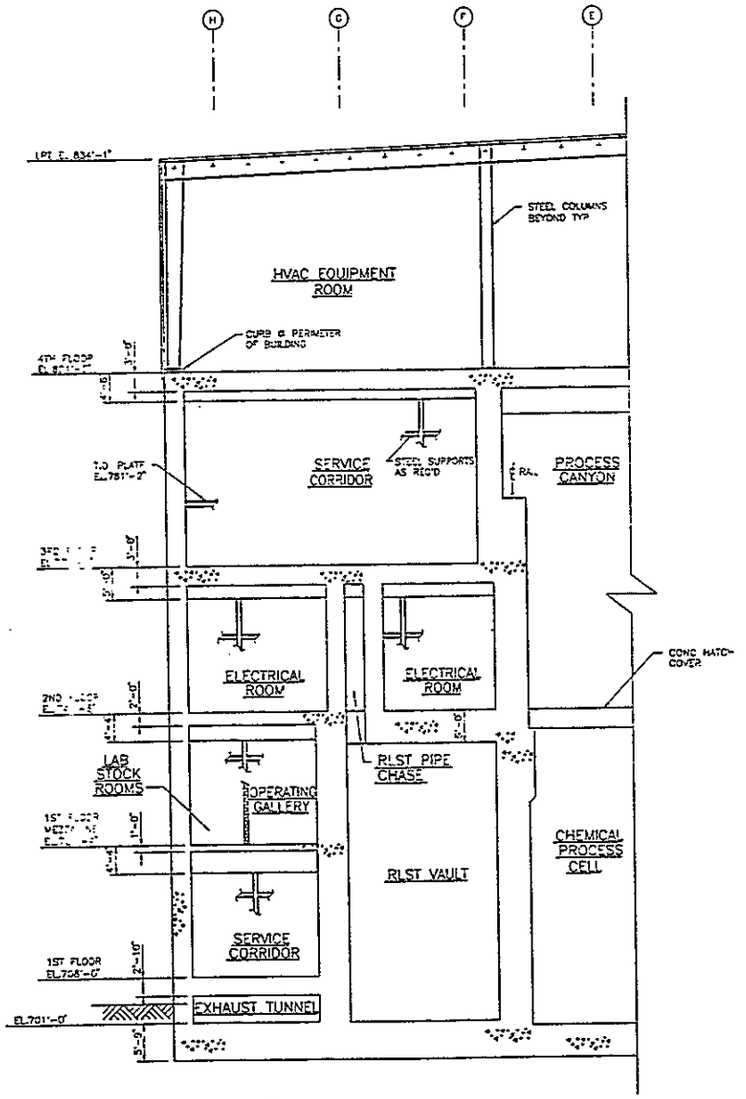
HANFORD WASTE VITRIFICATION PLANT

H-595 - 843724 - 3106

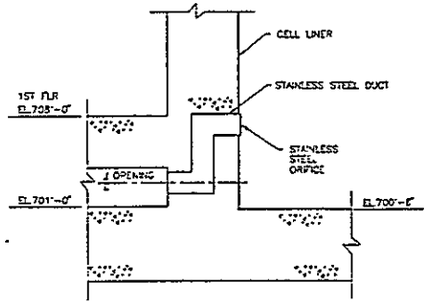
1/8"=1'-0" | 1

NONE | NOT REQ'D | H-2-118054 | 1 | 1 | 0

AUTOCAD 1 FF218054




SECTION F




SECTION G
SCALE 1/4"=1'-0"
H-2-118021 & H-2-118022

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

| | | | |
|---|---|---|---|
| 0 | REVISED SHEETS OF 1ST FLR MECHANICAL SEAL & | | |
| 00 | RELEASED FOR DETAILED DESIGN | CAW | KS | IRP | RMK |
| | | LJS | FGB | OPC | RNC |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

R GIBBONS
O CHAWLA
F BROOKS
J SHETS
R KEENAN
R KUMAR
G KURLANOFF
J GOODE
C WASSON

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SECTION F & G

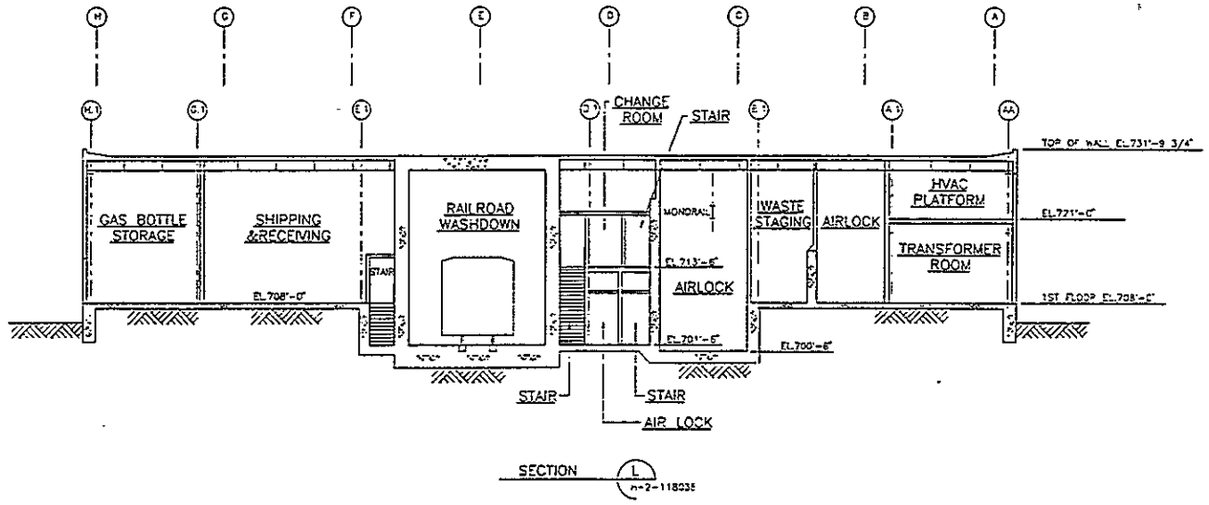
HANFORD WASTE VITRIFICATION PLANT

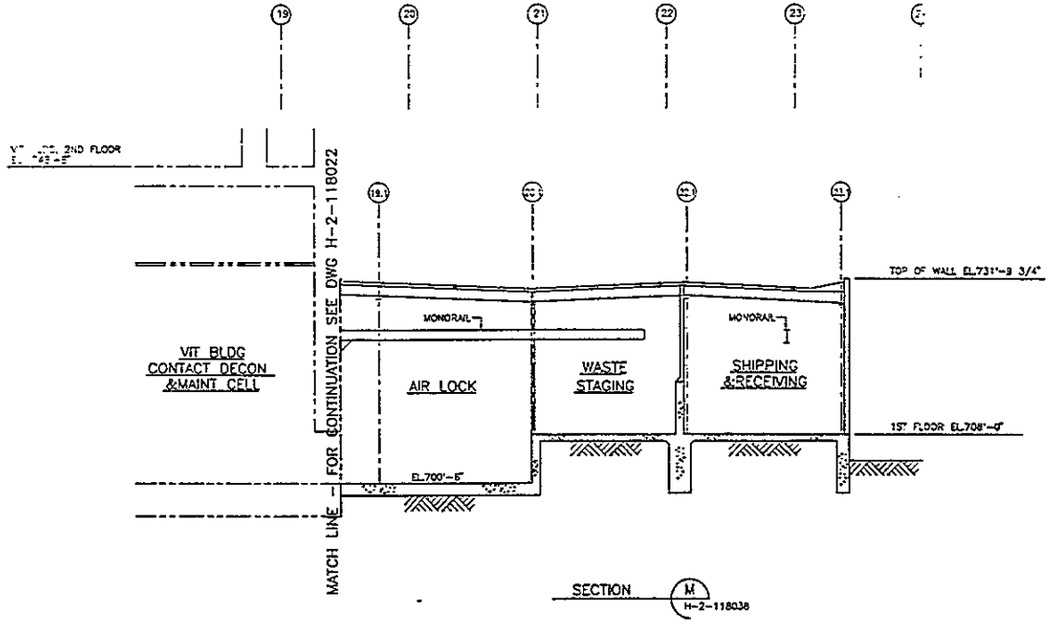
B-595 | 3104
1/8"=1'-0"

NONE | NOT REQ'D | H-2-118055 | 1 | 1 | 0

AUTOCAD
F7218055
13 OCT 90

9111271372




NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

0 5 10 15 20
PLOTTED PRINT SCALE

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV NO. | DATE | REVISION DESCRIPTION | | | | |
|---|---|---|---|---|---|---|
| 0 | 10/26/90 | REV FOR PDR-OF WALLS & CEILING OF BAGROOM WASHDOWN TO CONC MASONRY & LAPS PROJECT ENGINEERING SECTION PER CR 1.46 PHASE-0412 | | | | |
| 01 | 10/26/90 | REVISED WALLS IN AIRLOCK BY COL "B.1" TO CONC CEP HERE | | | RPK | RMK |
| | | PER CR NO.HNW-P-044" | | | DPG | RMK |
| 00 | 10/26/90 | RELEASED FOR DETAILED DESIGN | GCP | RPK | RPK | RMK |
| | | | KJS | FGB | DPC | RMG |

ENGINEERING RELEASE
REV. ____ DATE ____
CRD ____

U.S.DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-84RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | |
|---|---|
| DRAWN BY | R GIBBONS 10/26/90 |
| DESIGN BY | O CHAWLA 10/26/90 |
| CHECKED BY | P BROOKS 10/26/90 |
| PROJECT ENGINEER | J SMETS 10/26/90 |
| PROJECT MANAGER | R KEENAN 10/26/90 |
| DESIGN MANAGER | R KUMAR 10/22/90 |
| CONSTRUCTION MANAGER | G KUKLANOFF 10/26/90 |
| PROJECT MANAGER | H MELGAREJO 10/26/90 |
| CONSTRUCTION MANAGER | C FIELDEN 10/26/90 |

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
SECTIONS AT SHIPPING
& RECEIVING AREAS

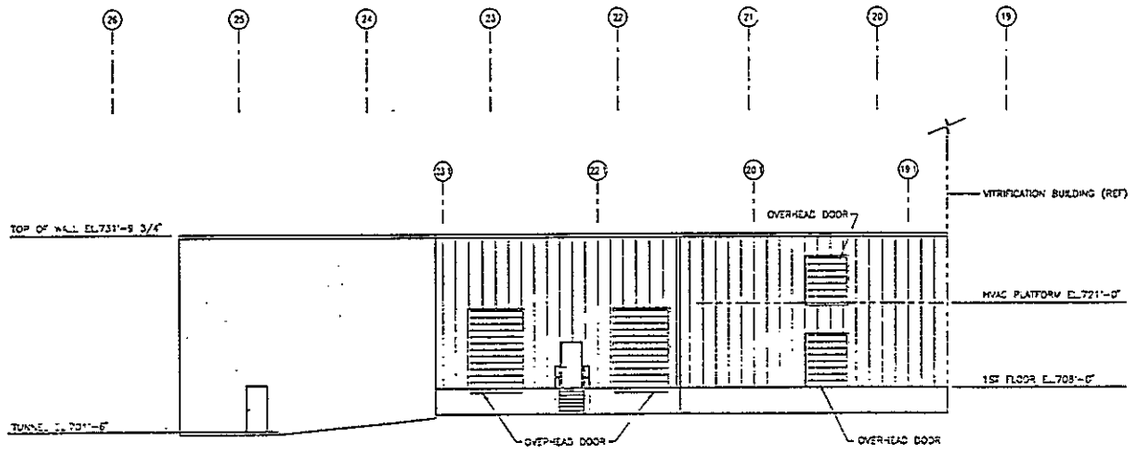
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| PROJECT NO. | B-595 | DRAWING NO. 845724 | SHEET NO. 3104 |
| SCALE | 1/8"=1'-0" | SHEET 1 OF 1 | |

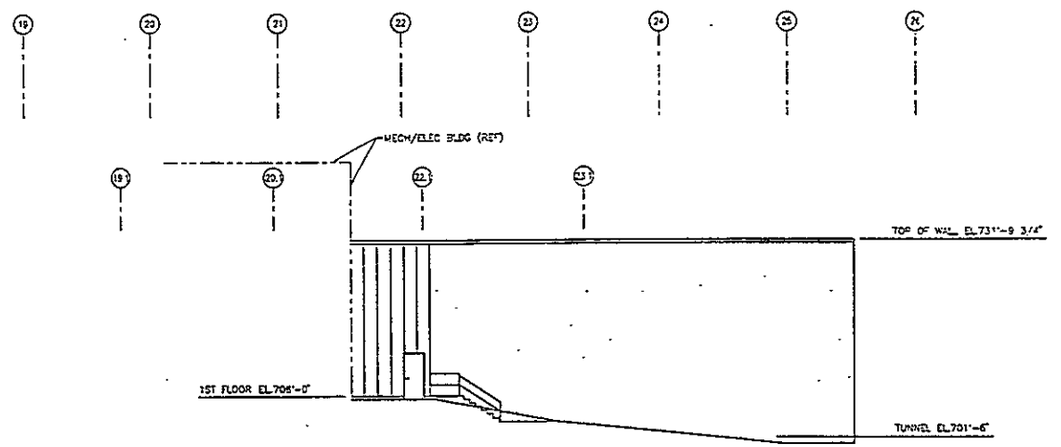
| | | | | | |
|---|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-118056 | 1 | 1 | 0 |

AUTOCAD 1 C0218056

9 1 1 2 1 / 1 1 0 3




WEST ELEVATION




EAST ELEVATION

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118021.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | | |
|---|---|---|---|---|---|
| 0 | | DELETED DOOR BETWEEN COL 20.1 & 22.1 RELEASED FOR PROJECT BASELINE CONTROL REFERENCE CHANGE-0420 | | | |
| 00 | | RELEASED FOR DETAILED DESIGN | | | |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL INC
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
VITRIFICATION BUILDING
ELEVATIONS AT SHIPPING & RECEIVING AREAS

HANFORD WASTE VITRIFICATION PLANT

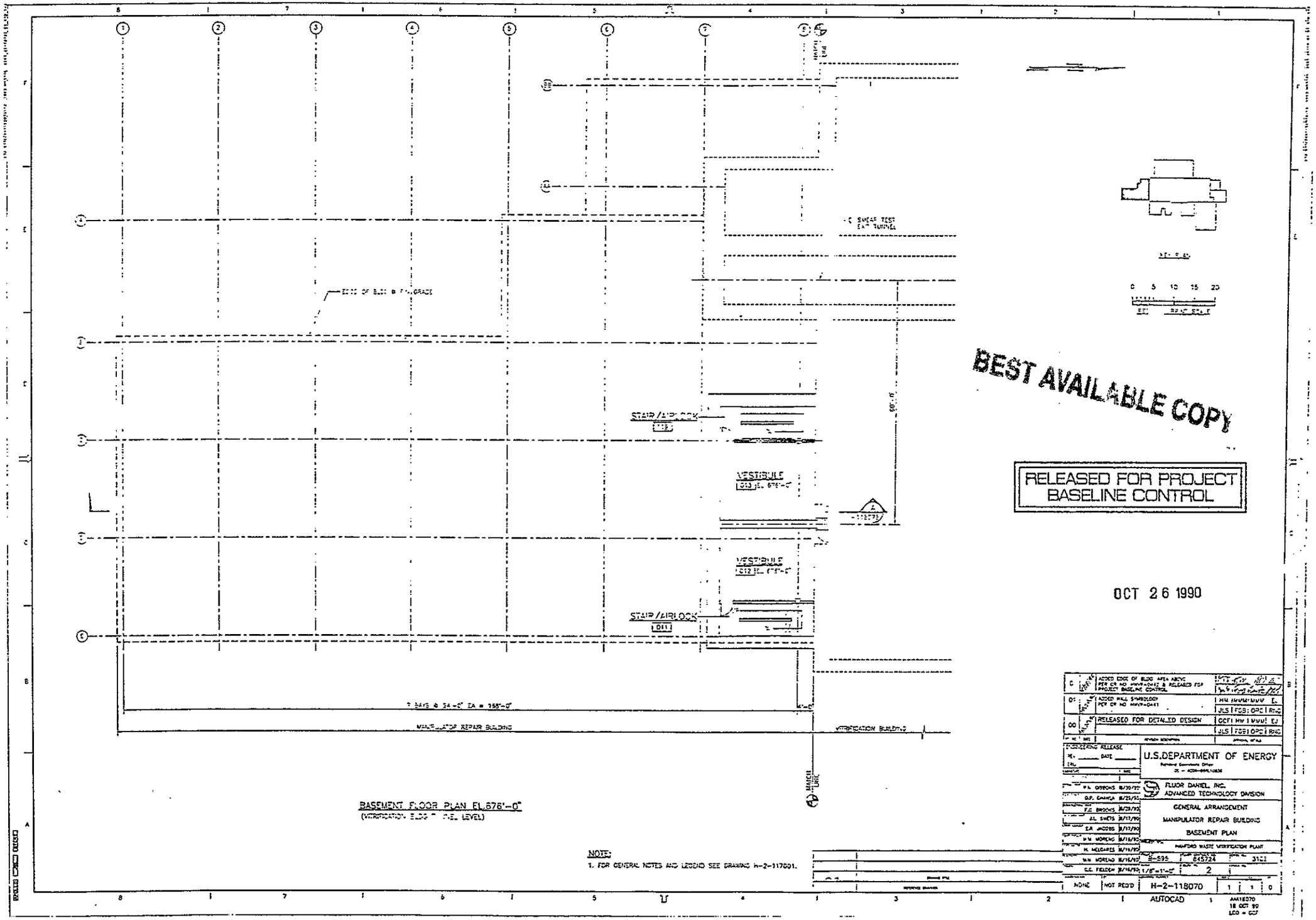
| | | |
|---|---|---|
| R GIBBONS | | |
| O CHAWLA | | |
| F BROOKS | | |
| J SMETS | | |
| R KEENAN | | |
| R KUMAR | | |
| G KUILANDER | | |
| H MELGARDS | | |
| G FIELDEN | | |

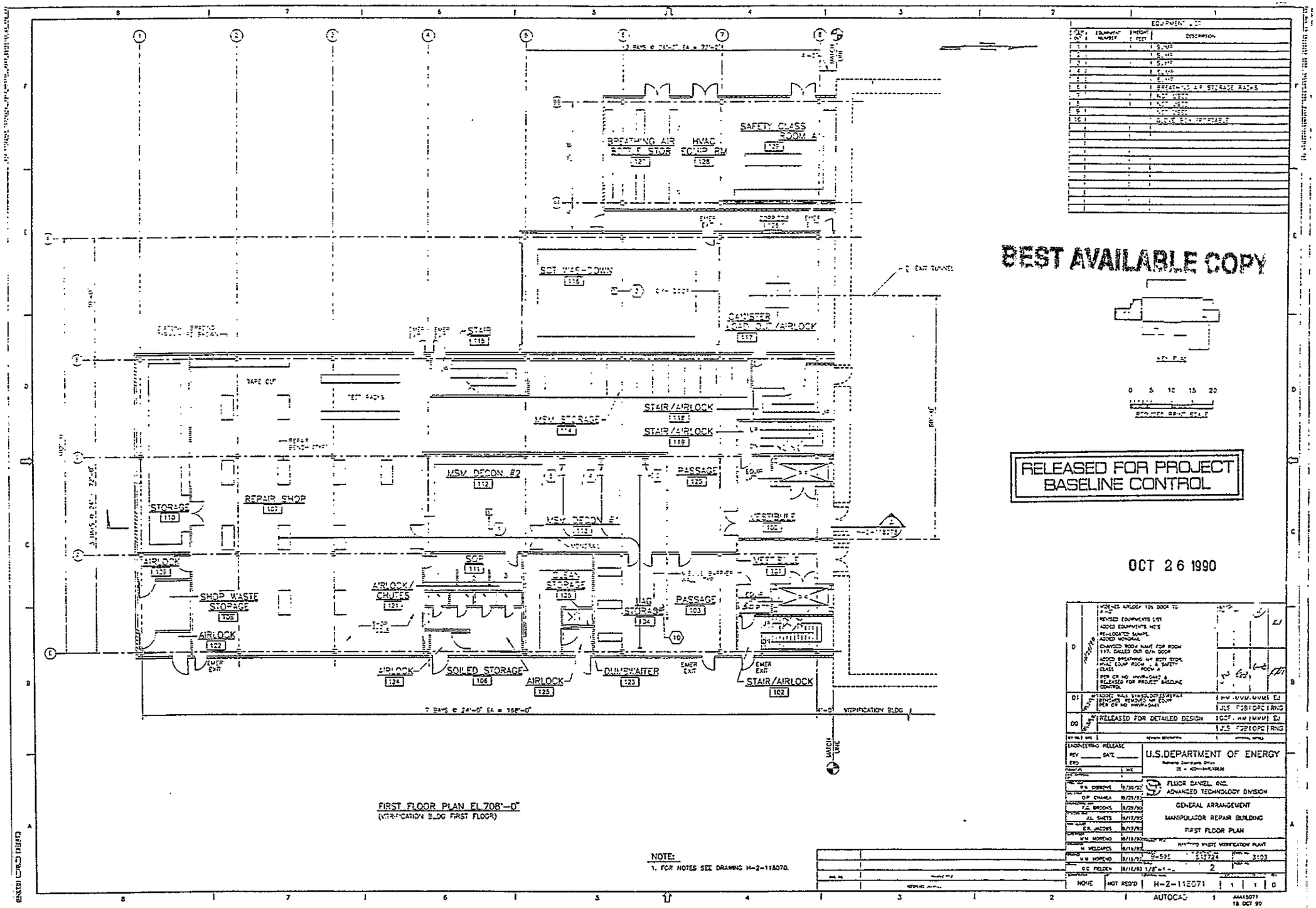
B-595 | 845724 | 3104
1/8"=1'-0" | 1

NONE | NOT REQ'D | H-2-118057 | 1 | 1 | 0

AUTOCAD 1 H218057 10 OCT 90

9112172116


STAIR/AIRLOCK
VESTIBULE
VESTIBULE
STAIR/AIRLOCK
MANIPULATOR REPAIR BUILDING
VITRIFICATION BUILDING
BASEMENT FLOOR PLAN EL.576'-0"
NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.
BEST AVAILABLE COPY
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
U.S.DEPARTMENT OF ENERGY
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
BASEMENT PLAN
HANFORD WASTE VITRIFICATION PLANT
H-2-118070
AUTOCAD

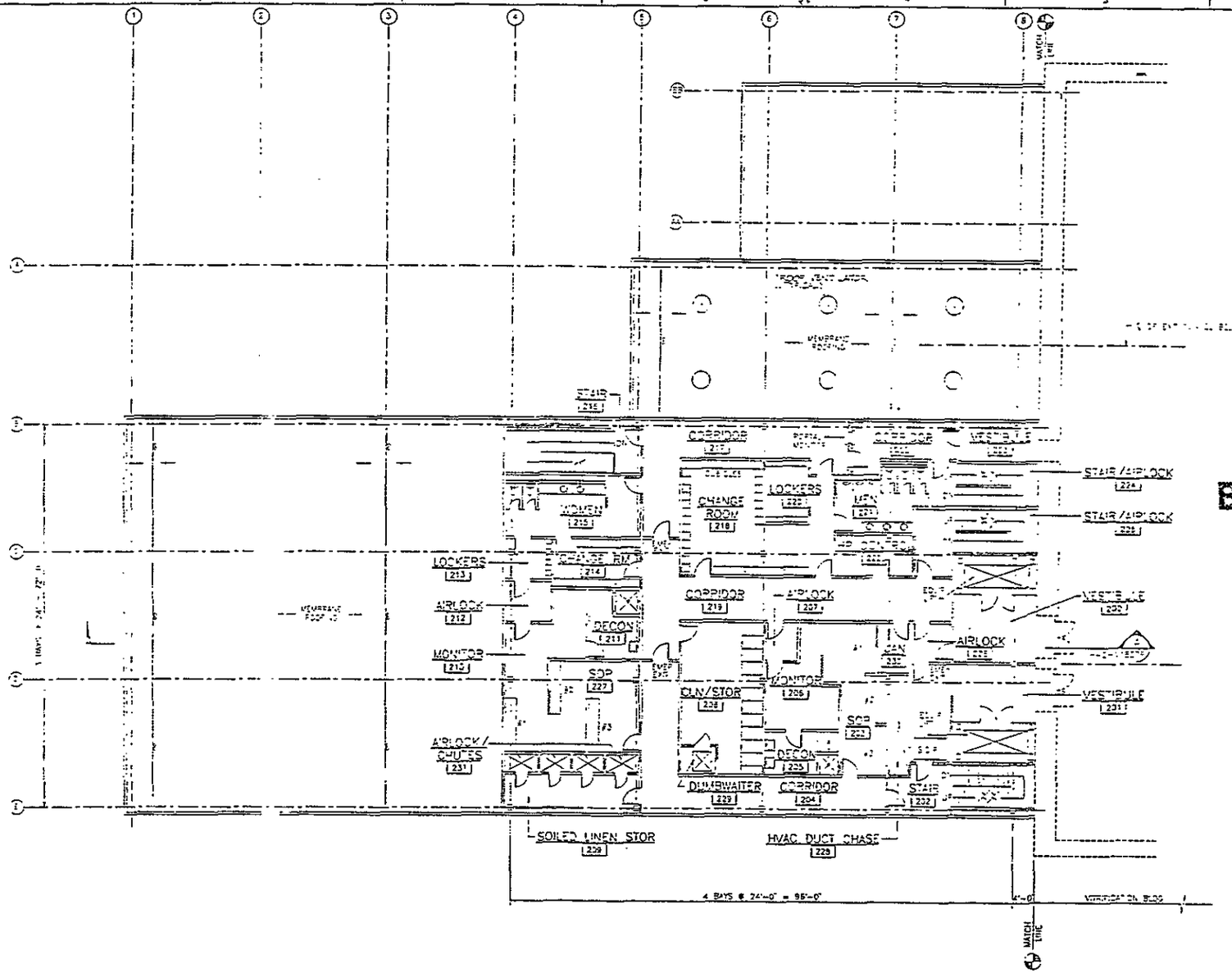


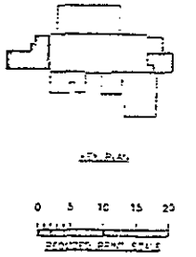

BEST AVAILABLE COPY

FIRST FLOOR PLAN EL.708'-0"
(VERIFICATION BLDG FIRST FLOOR)

NOTE:
1. FOR NOTES SEE DRAWING H-2-118070.

9112117.6




BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

SECOND FLOOR PLAN EL.748'-8"
(VIT. BLDG. MEZZANINE LEVEL)

NOTE:
1. FOR NOTES SEE DRAWING H-2-118070.

| | | | | | |
|---|---|---|---|---|---|
| 0 | CHANGED LAYS TO COUNTER; ADDED TYP; SECTOR CORRIDOR 217 W/PORTAL; ADDED WALL CHANGES; LAYS TO COUNTER MOUNTED TYP; PER CR NO. HWVP-0442 & RELEASED FOR PROJECT BASELINE CONTROL | | | | |
| 01 | ADDED WALL SYMBOLOGY PW 210; ADDED LINES OF 8" STAIR #200; & ENERG EXITS IN CORR #219; PER CR NO. HWVP-0444 | HV | MMM | MMM | EJ |
| | | JLS | FGB | OPC | RNG |
| 00 | RELEASED FOR DETAILED DESIGN | OCF | HV | MMM | EJ |
| | | JLS | FGB | OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
SECOND FLOOR PLAN

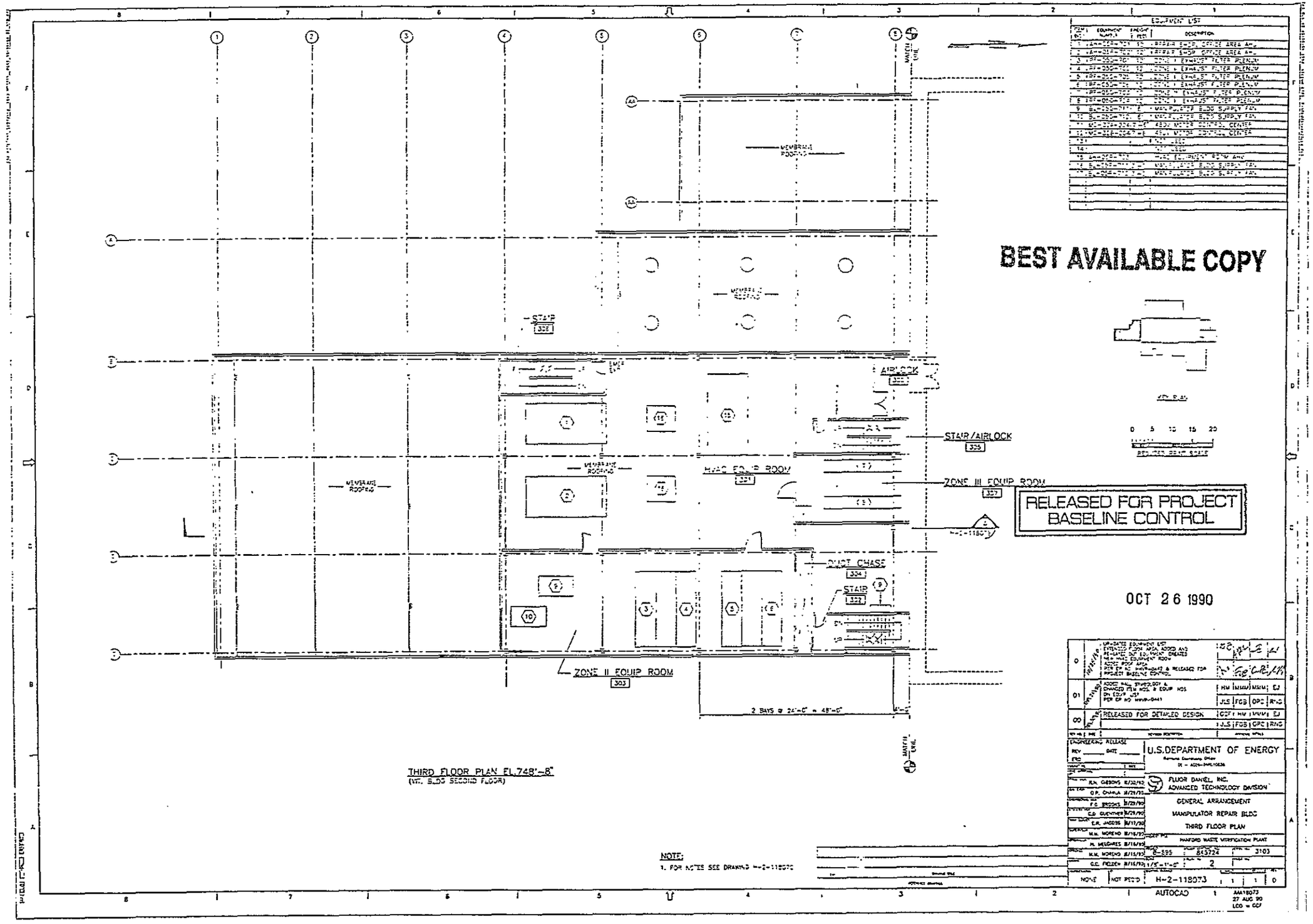
HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R.N. GIBBONS 8/30/90 | |
| O.P. CHANG 8/23/90 | |
| F.G. BROOKS 8/29/90 | |
| C.G. SUDENWEIR 8/23/90 | |
| E.R. JACOBS 8/17/90 | |
| M.W. MORENO 8/16/90 | |
| H. MELGARES 8/16/90 | |
| M.W. MORENO 8/16/90 | |
| G.C. FIELDEN 8/16/90 | |

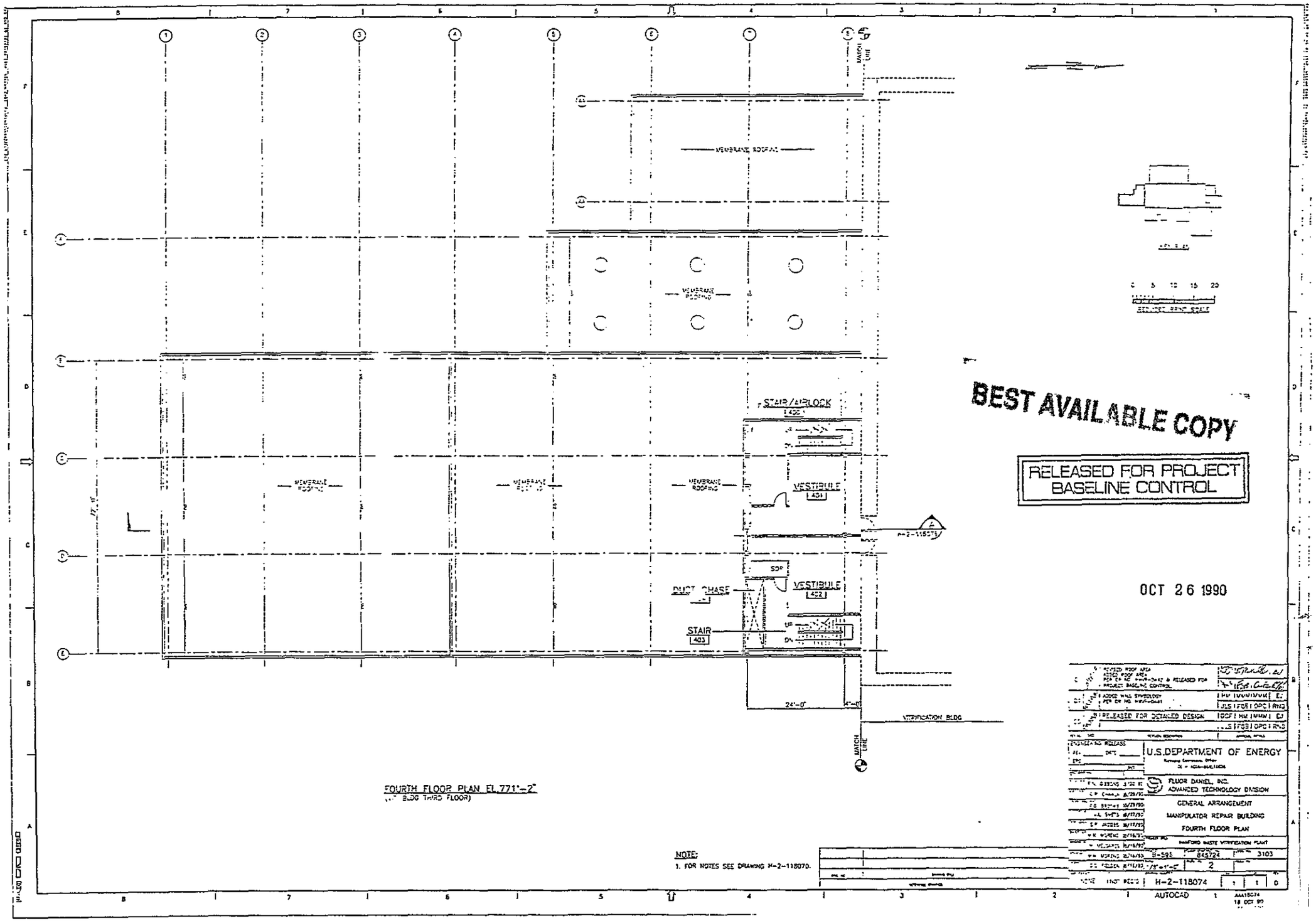
| | | | |
|---|---|---|---|
| DESIGN | B-595 | 845724 | 3103 |
| SCALE | 1/8"=1'-0" | SHEET NO. 2 | |
| NONE | NOT REQD | H-2-118072 | 1 1 0 |

AUTOCAD 1 AA118072 18 OCT 90 LCO = OCF

9111217 1177

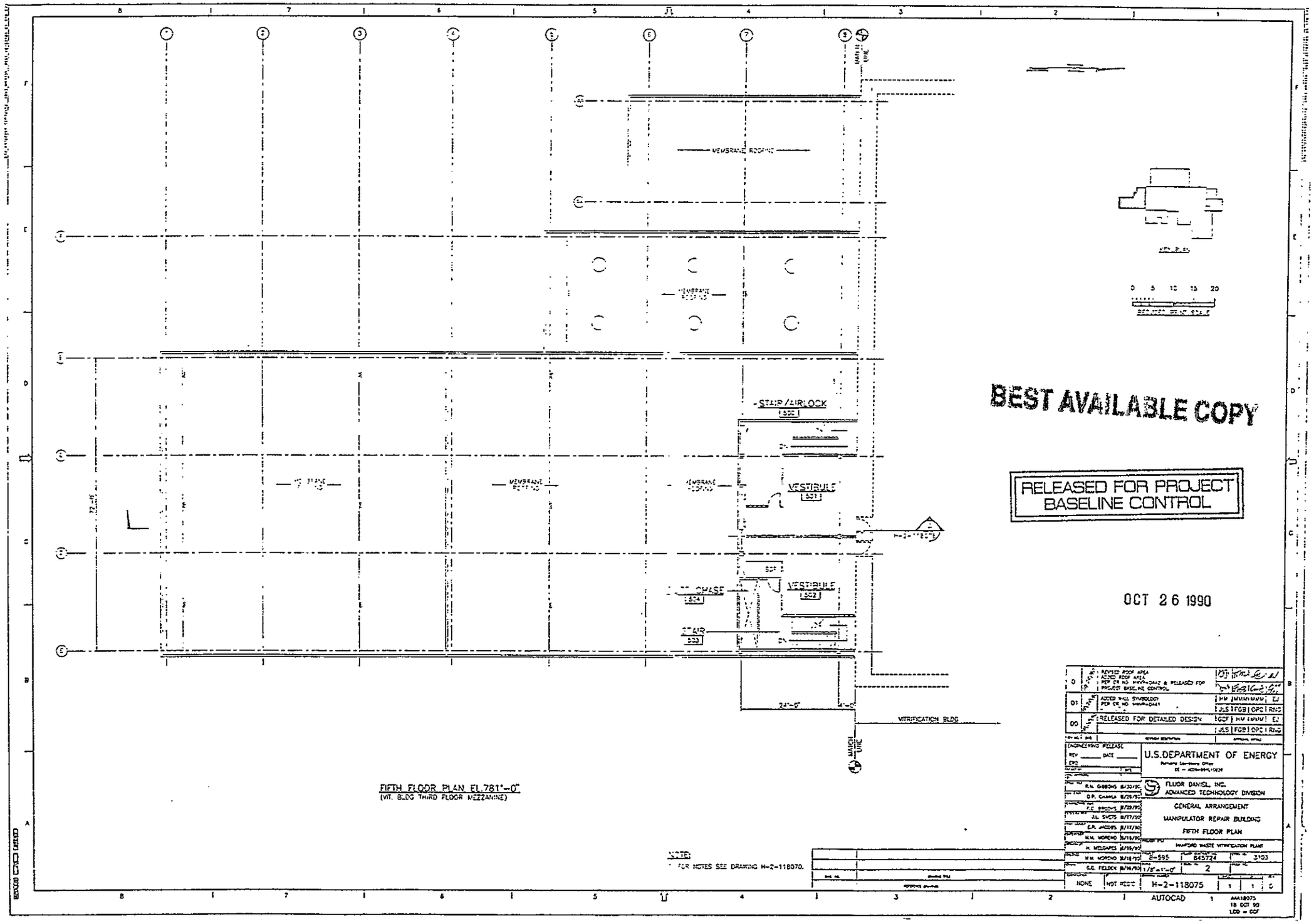

EQUIPMENT LIST
BEST AVAILABLE COPY
MEMBRANE ROOFING
STAIR
AIRLOCK
STAIR/AIRLOCK
HVAC EQUIP ROOM
ZONE III EQUIP ROOM
DUCT CHASE
ZONE II EQUIP ROOM
2 BAYS @ 24'-0" = 48'-0"
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
THIRD FLOOR PLAN EL.748'-8"
(WT. BLDG SECOND FLOOR)
NOTE:
1. FOR NOTES SEE DRAWING H-2-118072
RELEASED FOR DETAILED DESIGN
ENGINEERING RELEASE
U.S.DEPARTMENT OF ENERGY
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
MANIPULATOR REPAIR BLDG
THIRD FLOOR PLAN
HANFORD WASTE VITRIFICATION PLANT
H-2-118073
AUTOCAD

9211216

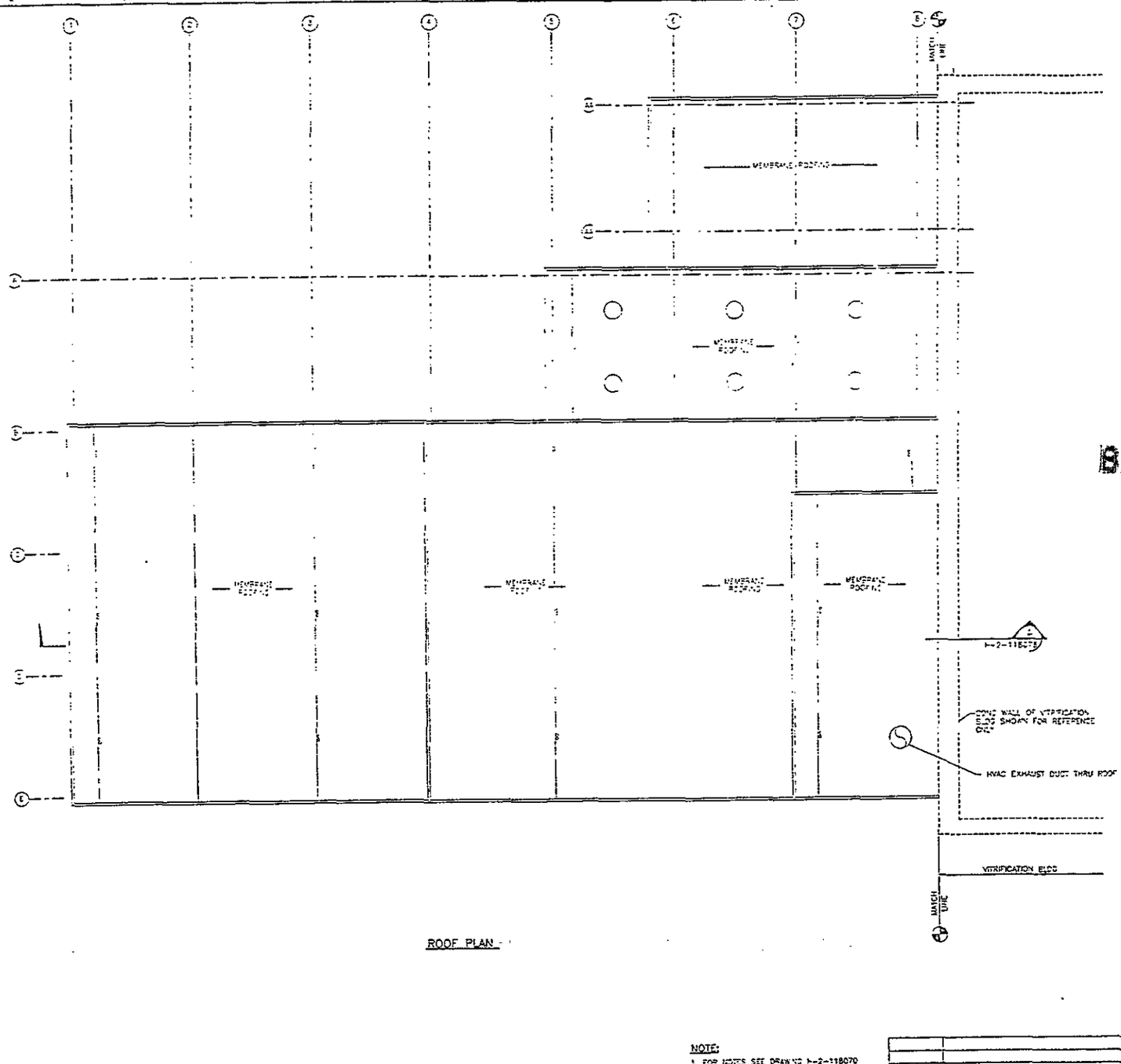



NOTE:
1. FOR NOTES SEE DRAWING H-2-118070.

9112116

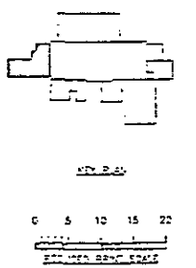

MEMBRANE ROOFING
STAIR/AIRLOCK
VESTIBULE
CHASE
STAIR
VITRIFICATION BLDG
24'-0"
MATCH LINE
FIFTH FLOOR PLAN EL.781'-0"
(VIT. BLDG THIRD FLOOR MEZZANINE)
NOTE:
FOR NOTES SEE DRAWING H-2-118070.
BEST AVAILABLE COPY
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
REVISED ROOF AREA
ADDED ROOF AREA
PER CR NO
PROJECT BASELINE CONTROL
ADDED WALL SYMBOLOGY
RELEASED FOR DETAILED DESIGN
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
FIFTH FLOOR PLAN
HANFORD WASTE VITRIFICATION PLANT
H-2-118075
AUTOCAD

9112170110




ROOF PLAN

NOTE:
1. FOR NOTES SEE DRAWING H-2-118070




BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | | | |
|---|---|---|---|---|
| RELEASED FOR DETAILED DESIGN | GCF | HW | MVW | EJ |
| | JLS | FGS | CPC | RHC |

ENGINEERING RELEASE
NO. ____ DATE ____
ECN ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
P.O. Box 550, Richland, Washington

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

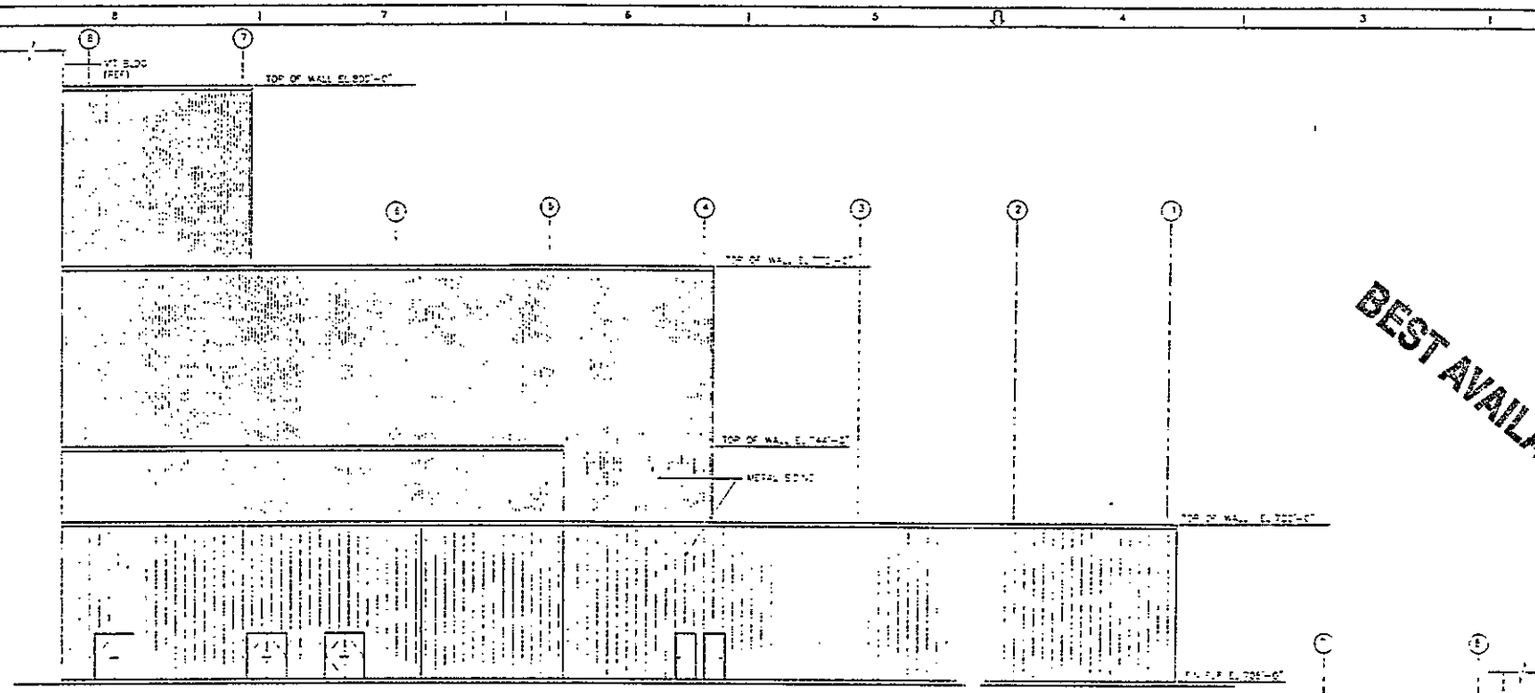
GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
ROOF PLAN

HANFORD WASTE VITRIFICATION PLANT

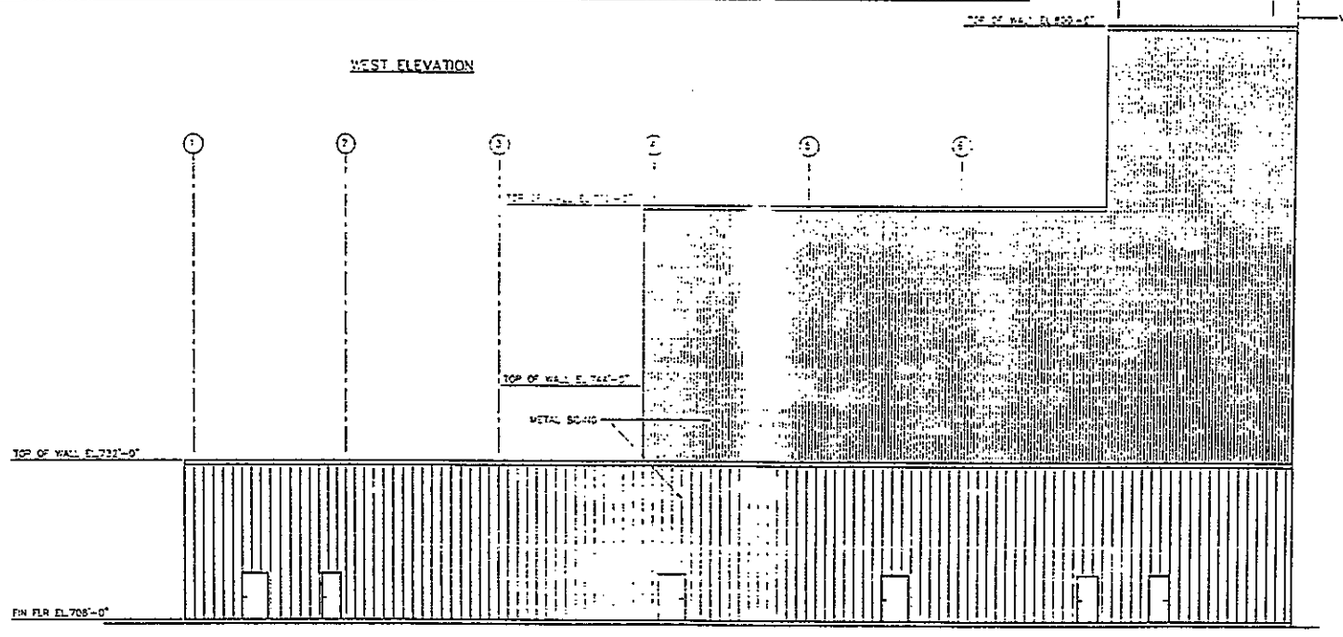
| | | | |
|---|---|---|---|
| B-504 | 845724 | | 3103 |
| 1/8" = 1'-0" | 2 | | |

| | | | | | |
|---|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-118076 | 1 | 1 | 0 |

AUTOCAD 1 AA118076 18 OCT 90

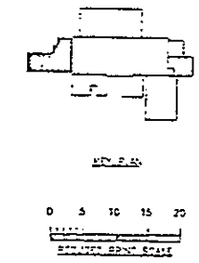



WEST ELEVATION




EAST ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-118071




BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | DRAWN | CHECKED | ENGINEER | PROJECT ENGINEER |
|---|---|---|---|---|---|---|
| 0 | 10/26/90 | REVISED ELEVATION PER CP NO. HWR-0441 & RELEASED FOR PROJECT BASELINE CONTROL | | | | |
| 00 | 10/18/90 | RELEASED FOR DETAILED DESIGN | DCF | HM | MMM | EJ |
| | | | AS | FCG | OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____
FTO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-87RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | | |
|---|---|---|
| DRAWN BY | R.N. GIBBONS | 8/30/90 |
| DESIGN BY | D.P. CHAVEZ | 8/29/90 |
| | F.G. BROOKS | 8/29/90 |
| TITLE BY | J.L. SMITS | 8/17/90 |
| | E.R. JACOBS | 8/17/90 |
| CHECKED BY | M.M. MORENO | 8/18/90 |
| | H. MELGARES | 8/16/90 |
| ENGINEER | M.M. MORENO | 8/18/90 |
| | C.C. FIELDEN | 8/16/90 |

GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
EXTERIOR ELEVATIONS

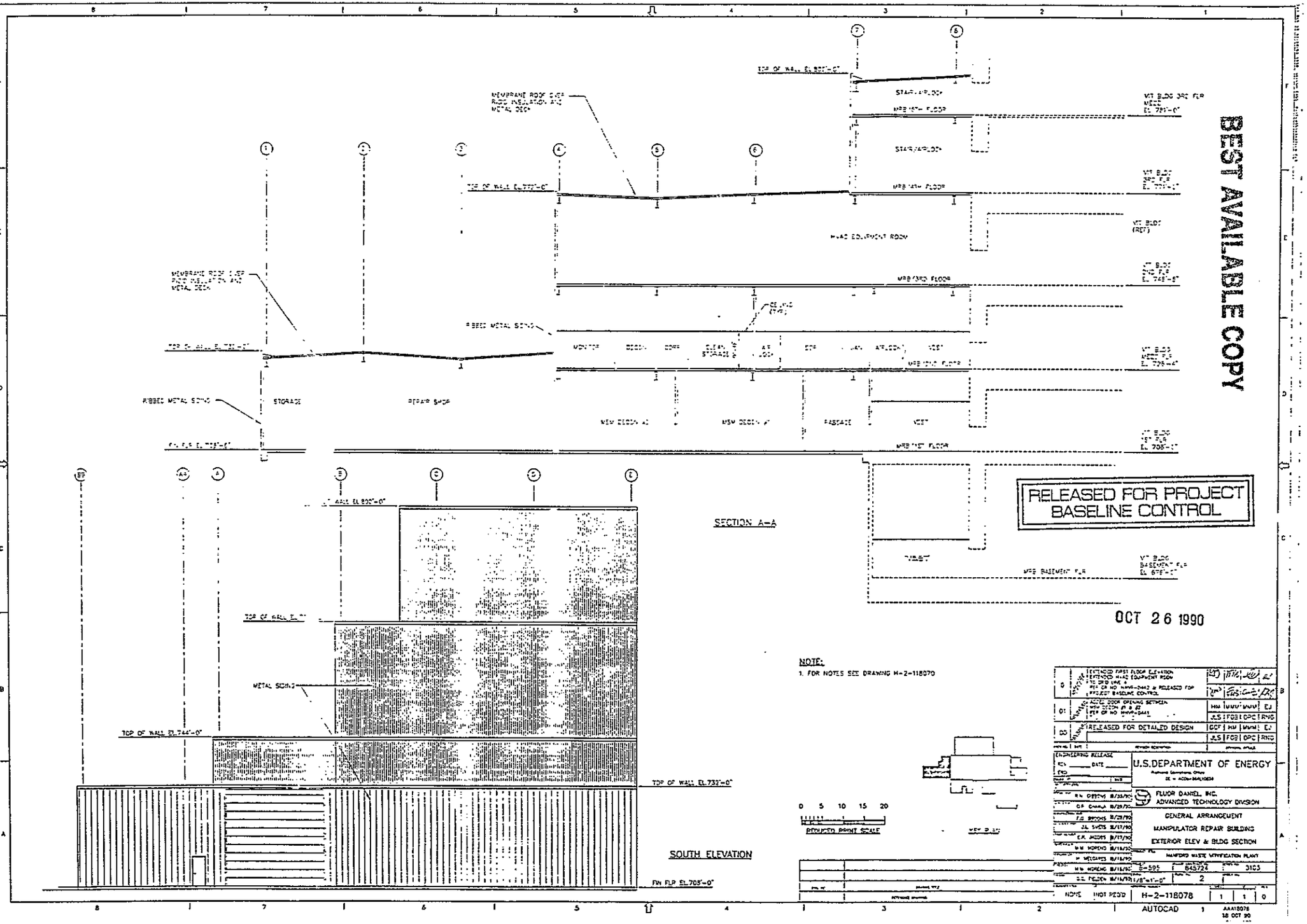
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| PROJECT NO. | B-595 | 3103 |
| SCALE | 1/8"=1'-0" | SHEET NO. 2 |

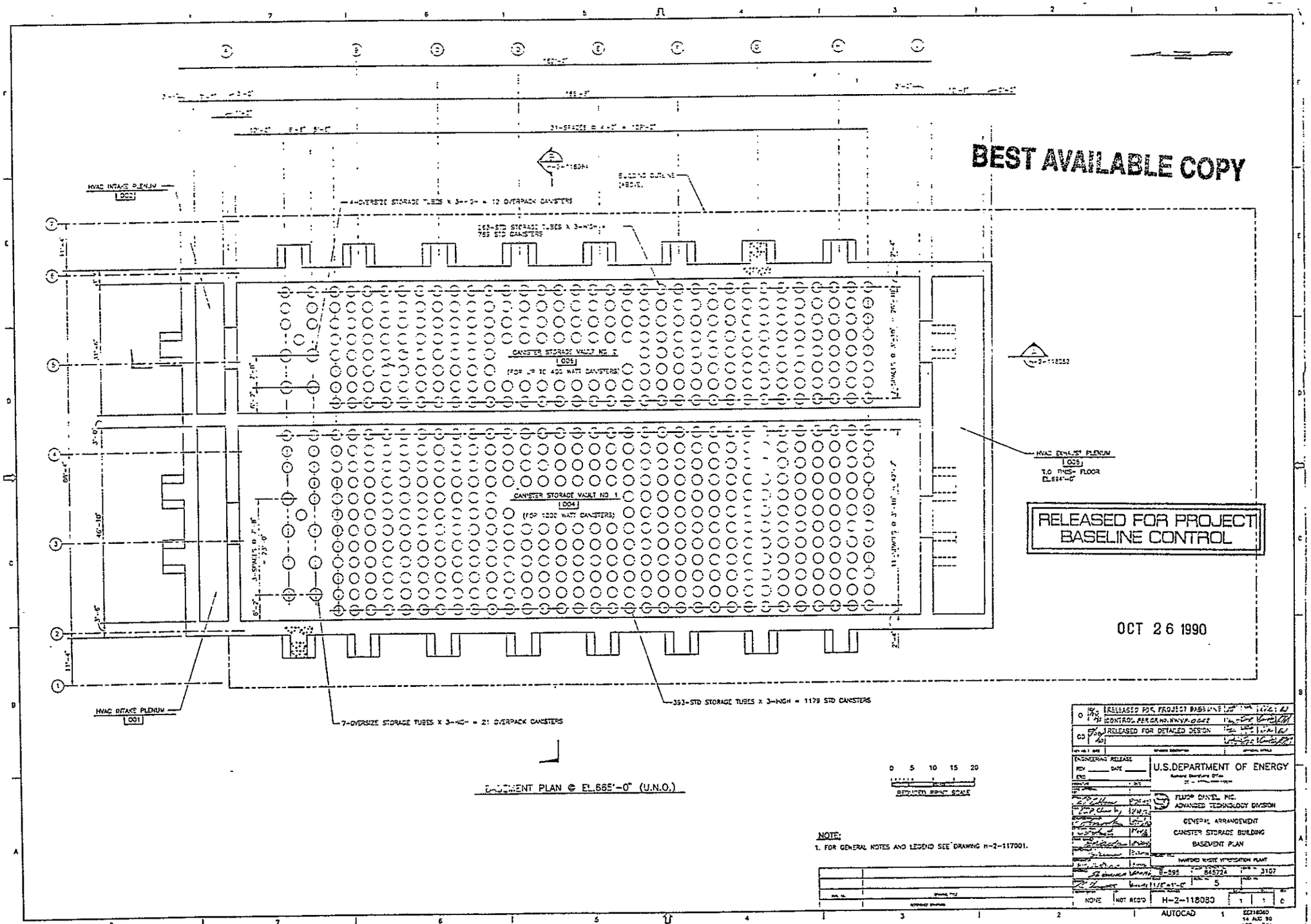
NONE | NOT REQ'D | H-2-118077 | 1 | 1 | 0

AUTOCAD 1 AAA18077 18 OCT 90

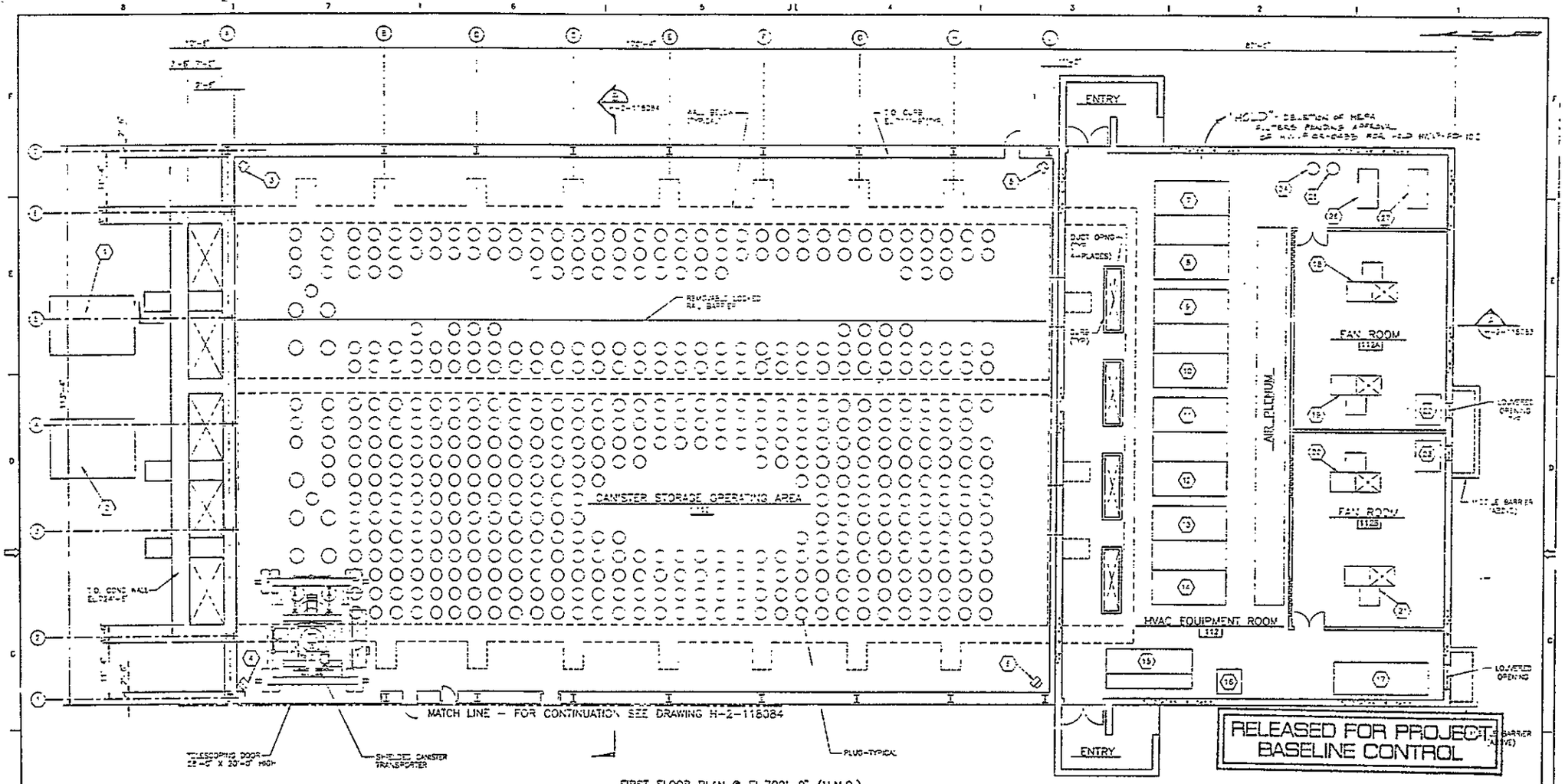
9112112


BEST AVAILABLE COPY
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
SECTION A-A
SOUTH ELEVATION
NOTE:
1. FOR NOTES SEE DRAWING H-2-118070
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
MANIPULATOR REPAIR BUILDING
EXTERIOR ELEV & BLDG SECTION
HANFORD WASTE VITRIFICATION PLANT
H-2-118078
AUTOCAD

9112121113


BEST AVAILABLE COPY
HVAC INTAKE PLENUM
1.001
4-OVERSIZE STORAGE TUBES X 3-HIGH = 12 OVERPACK CANISTERS
BUILDING OUTLINE
CANISTER STORAGE VAULT NO. 2
1.005
(FOR UP TO 400 WATT CANISTERS)
CANISTER STORAGE VAULT NO. 1
1.004
(FOR 1000 WATT CANISTERS)
HVAC EXHAUST PLENUM
1.006
T.O. FINISH FLOOR
ELEV. 665'-0"
RELEASED FOR PROJECT
BASELINE CONTROL
OCT 26 1990
HVAC INTAKE PLENUM
1.001
7-OVERSIZE STORAGE TUBES X 3-HIGH = 21 OVERPACK CANISTERS
393-STD STORAGE TUBES X 3-HIGH = 1179 STD CANISTERS
BASEMENT PLAN @ EL.665'-0" (U.N.O.)
0 5 10 15 20
REDUCED PRINT SCALE
NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.
RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. NWVP-0042
RELEASED FOR DETAILED DESIGN
ENGINEERING RELEASE
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
BASEMENT PLAN
HANFORD WASTE VITRIFICATION PLANT
B-595
845724
3107
5
1/8"=1'-0"
NONE
NOT REQ'D
H-2-118030
AUTOCAD
14 AUG 90
LCD = TJH

9 1 1 2 1 / 1 0 1 4




RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

FIRST FLOOR PLAN @ EL.709'-0" (U.N.O.)

| EQUIPMENT LIST | | | |
|---|---|---|---|
| REV NO | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
| 1 | AH-CS-701 | 110'-0" | CANISTER STORAGE VAULT AHU |
| 2 | AH-CS-702 | 110'-0" | CANISTER STORAGE VAULT AHU |
| 3 | AH-CS-721 | 12'-0" | UNIT HEATER |
| 4 | AH-CS-722 | 12'-0" | UNIT HEATER |
| 5 | AH-CS-723 | 12'-0" | UNIT HEATER |
| 6 | AH-CS-724 | 12'-0" | UNIT HEATER |
| 7 | PF-CS-711 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 8 | PF-CS-712 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 9 | PF-CS-713 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 10 | PF-CS-714 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 11 | PF-CS-715 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 12 | PF-CS-716 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 13 | PF-CS-717 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 14 | PF-CS-718 | 111'-0" | CANISTER STORAGE VAULT FILTER PLENUM |
| 15 | PF-CS-704 | 17'-0" | CANISTER STORAGE OPERATING AREA FILTER PLENUM |
| 16 | [illegible] | [illegible] | [illegible] |

| EQUIPMENT LIST (CONT) | | | |
|---|---|---|---|
| REV NO | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
| 17 | AH-CS-703 | 8'-0" | CANISTER STORAGE HVAC EQUIPMENT ROOM AHU |
| [illegible] | [illegible] | [illegible] | CANISTER STORAGE VAULT EXHAUST FAN |
| [illegible] | [illegible] | [illegible] | CANISTER STORAGE VAULT EXHAUST FAN |
| [illegible] | [illegible] | [illegible] | CANISTER STORAGE VAULT EXHAUST FAN (STANDBY) |
| [illegible] | [illegible] | [illegible] | CANISTER STORAGE VAULT EXHAUST FAN (STANDBY) |
| 23 | AH-CS-705 | 4'-0" | HEAT FROM (EMERGENCY SUPPLY FAN) |
| 22 | AH-CS-706 | 4'-0" | HEAT FROM (EMERGENCY SUPPLY FAN) |
| 24 | AH-CS-707A | 3'-0" | HPS VAC SYSTEM HEPA FILTER |
| 25 | PF-CS-707B | 3'-0" | HPS VAC SYSTEM HEPA FILTER |
| 26 | VP-CS-707A | 3'-0" | HPS VACUUM BLOWER |
| 27 | VP-CS-707B | 3'-0" | HPS VACUUM BLOWER |

BEST AVAILABLE COPY

0 5 10 15 20

NOTE:

1. FOR NOTES SEE DRAWING H-2-118050.

| REV | DATE | DESCRIPTION | | | |
|---|---|---|---|---|---|
| 0 | | REV DOOR SIZE IN RMS 1124 & 1125 SIZE OF AIR PLENUM RELOCATED BASED OF RMS 1124 & 1125 ADDED EQUIP. 24, 25, 26 & 27 IN RM 112 & EQ. 4 LOC. REVISED FOR PROJECT BASELINE CONTROL PER CR NO HNF-0442. | | | |
| 00 | 06/28/90 | RELEASED FOR DETAILED DESIGN | | RPK | ERJ |
| | | | | J.J.S. 7021 OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____
ENG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-87RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

R. GIBBONS 10/26/90
C. CHAWLA 10/26/90
F. BROOKS 10/26/90
J. SMETS 10/26/90
E. JACOBS 10/26/90
R. KUMAR 10/26/90
P. GRANT 10/26/90
S. GANIOLA 10/26/90
T. HORVATH 10/26/90

GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
FIRST FLOOR PLAN

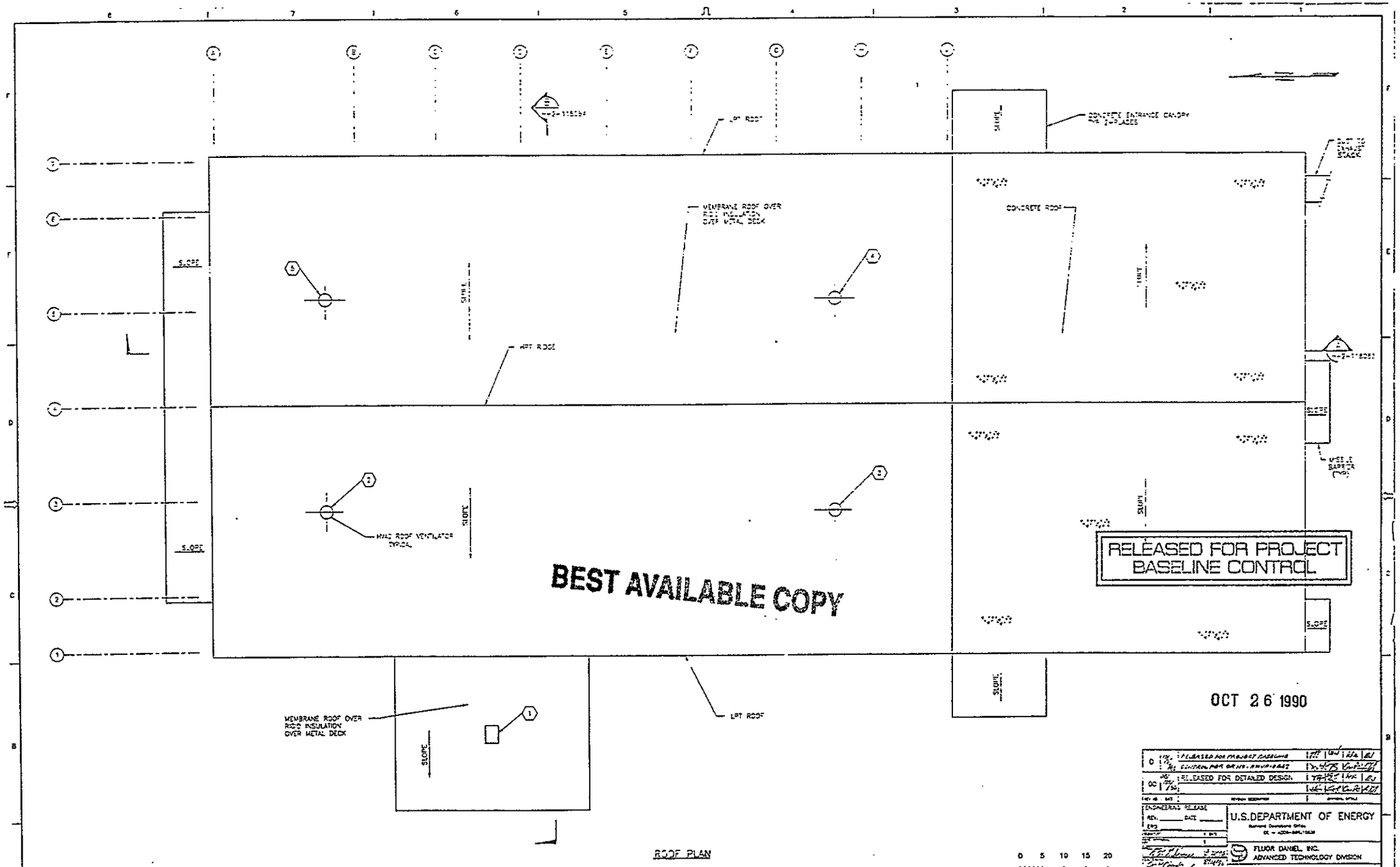
HANFORD WASTE VITRIFICATION PLANT

| | | | | |
|---|---|---|---|---|
| NONE | NOT REQ'D | H-2-118051 | 5 | 0 |

AUTOCAD

FF218051
18 OCT 90
LCD w Chw

9112217.0115




ROOF PLAN

| EQUIPMENT LIST | | | |
|---|---|---|---|
| ITEM NO. | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
| 1 | AH-05A-704 | 4'-0" | OFFICE A/C UNIT |
| 2 | BL-05A-704 | 4'-0" | EXHAUST FAN |
| 3 | BL-05A-705 | 4'-0" | EXHAUST FAN |
| 4 | BL-05A-703 | 4'-0" | EXHAUST FAN |
| 5 | BL-05A-702 | 4'-0" | EXHAUST FAN |

NOTE:
1. FOR NOTES SEE DRAWING H-2-118080.

0 5 10 15 20
REDUCED PRINT SCALE

| REV. | | REVISION DESCRIPTION | DRAWN | CHK | APPROVED |
|---|---|---|---|---|---|
| D | | RELEASED FOR PROJECT BASELINE | | | |
| | | CONTROL PER DR NO. RWV-1-0042 | | | |
| CC | | RELEASED FOR DETAILED DESIGN | | | |

ENGINEERING RELEASE
REV. ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
ROOF PLAN

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 10-4-90 | B-595 | 845724 | 3107 |
| | | SHEET 5 | |

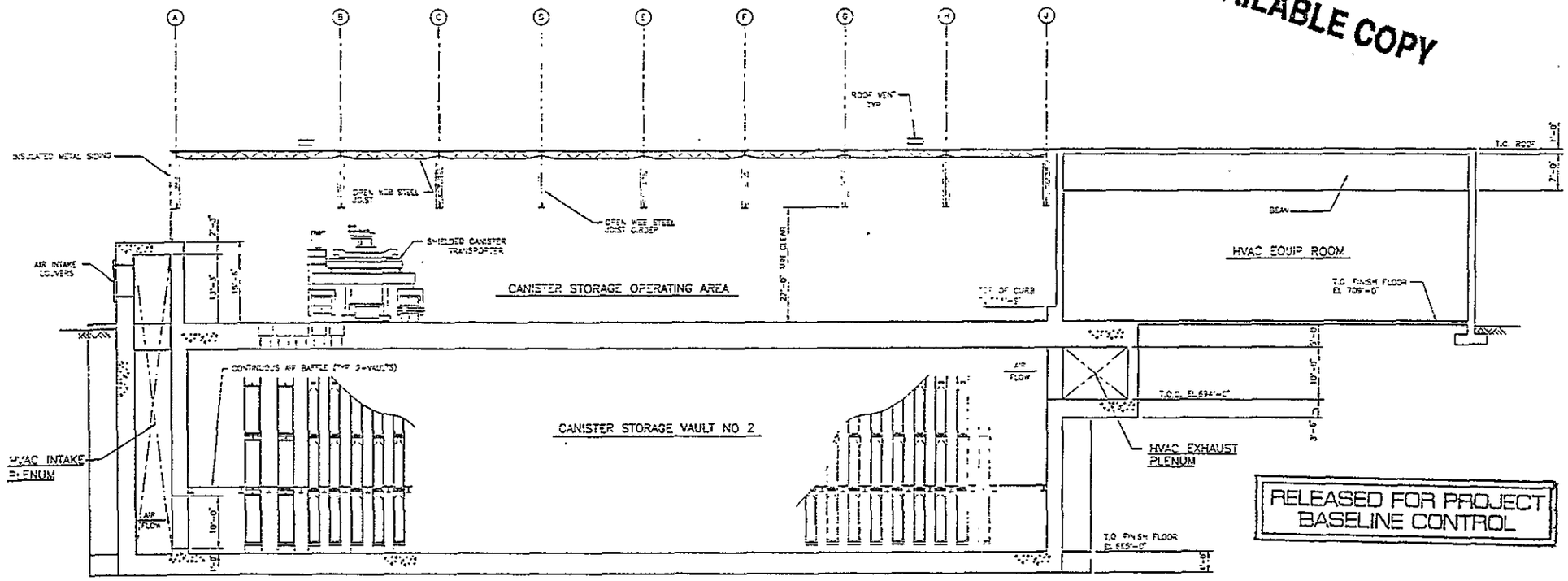
NONE | NOT REQD | H-2-118082 | 1 | 1 | 0

AUTOCAD

EE218033
17 AUG 90
LCO = CDF

9 1 1 2 1 1 0 1 6

BEST AVAILABLE COPY




RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

SECTION A
H-2-118059, 118081 & 118082

NOTE:
1. FOR NOTES SEE DRAWING H-2-118080.

0 5 10 15 20
REDUCED PRINT SCALE

| | | | | | |
|---|---|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE | | | |
| C | 8/23/90 | RELEASED FOR DETAILED DESIGN | | | |

ENGINEERING RELEASE
KEY _____ DATE _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
BUILDING SECTION

HANFORD WASTE VITRIFICATION PLANT

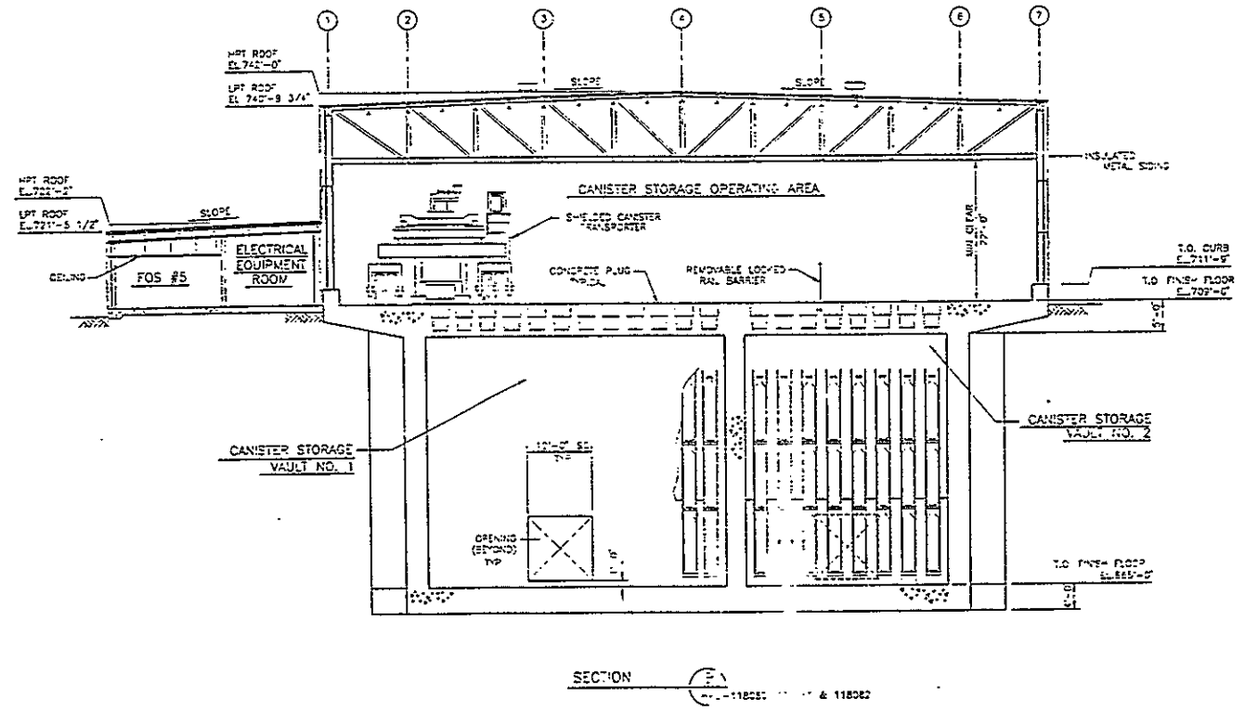
B-595 | 845724 | 3107
1/8"=1'-0" | 5

NONE | NOT REQ'D | H-2-118083 | 1 | 1 | 0

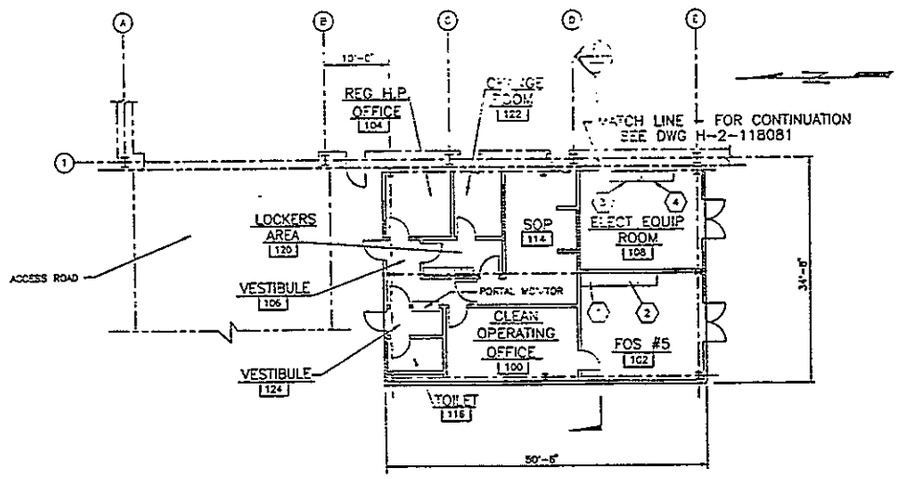
AUTOCAD

EE316283
17 AUG 90
1200 = 0CF

9112117




SECTION




FIRST FLOOR PLAN (PARTIAL) @ EL.709'-0" (U.N.O.)

NOTE:
1. FOR NOTES SEE DRAWING H-2-118080.

0 5 10 15 20
REDUCED PRINT SCALE

EQUIPMENT LIST

| REV (D) | EQUIPMENT NUMBER | MODEL | DESCRIPTION |
|---|---|---|---|
| 1 | DPH-810-1034 | 7'-0" | DISTILLATE PROCESSING UNIT (TOE 1) |
| 2 | DPH-810-1033 | 7'-0" | DISTILLATE PROCESSING UNIT (TOE 2) |
| 3 | MC-334-205 | 7'-0" | 480V MOTOR CONTROL CENTER |
| 4 | MC-338-705 | 7'-0" | 480V MOTOR CONTROL CENTER |

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | DESCRIPTION | BY | CHK | APPR |
|---|---|---|---|---|---|
| D | 9/24/92 | UPDATED PER TCN, REV PNO 102,104,106,114, 116,118,120, ADDED PN 124 AND RELEASED FOR PROJECT BASELINE CONTROL, PER CAHG. MANAGEMENT | | | |
| D1 | 8/14/92 | ADDED WALL SYMBOLOGY TO STUD WALL & SIDING OFFSET FLR PLAN (PARTIAL) PER DR441. | LRB | FRS | RPK / ERJ |
| | | | JLS | IFGS | IDPC / RNG |
| D0 | 8/24/90 | RELEASED FOR DETAILED DESIGN | TJM | DSK | RPK / ERJ |
| | | | JLS | IFGS | IDPC / RNG |

ENGINEERING RELEASE
REV ____ DATE ____
CRD ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - 620-0001/0620

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | | |
|---|---|---|
| R. OSBORNS | 8/28/92 | |
| O. CHAWLA | 8/25/92 | |
| E. BROOKS | 8/25/92 | |
| J. SMITS | 8/24/92 | |
| E. JACOBS | 8/20/92 | |
| R. KUMAR | 8/20/92 | |
| P. GRANT | 8/20/92 | |
| S. DAYOLA | 8/14/92 | 9-595 / 845724 / 3'02 |
| T. HORVATH | 8/14/92 | 1/8"=1'-0" / 5 |

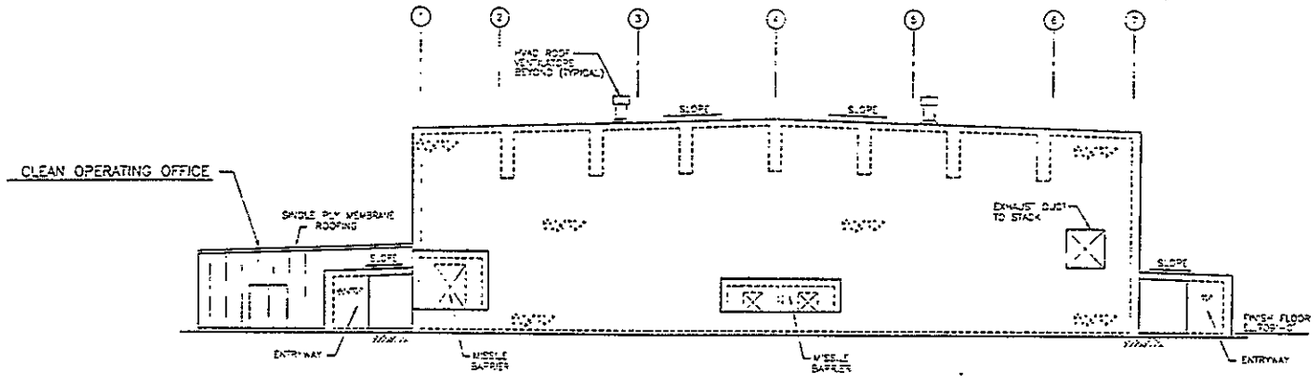
GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
PARTIAL SECTION & BUILDING SECTION

HANFORD WASTE VITRIFICATION PLANT

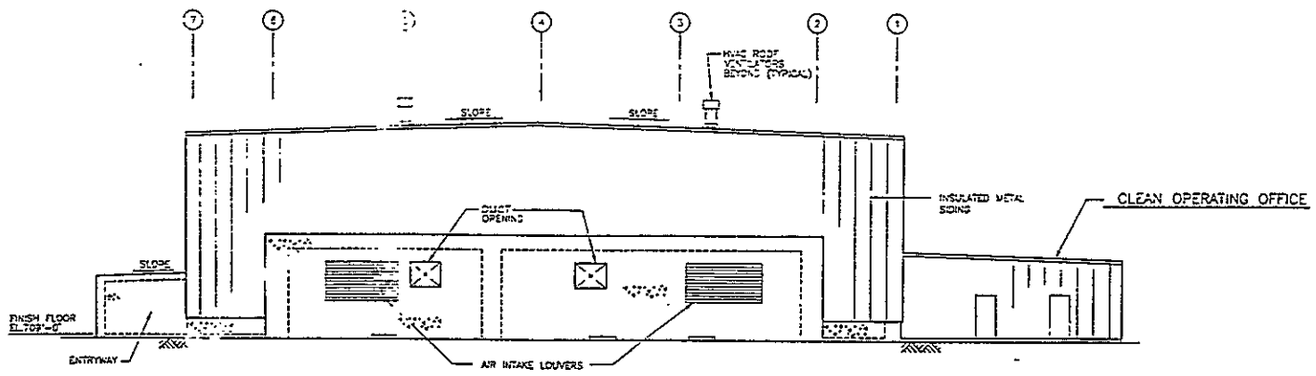
NONE | NOT REQ'D | H-2-118084

AUTOCAD 1 | 02218004 12 OCT 90 LCD = V.K.

9111271118




SOUTH ELEVATION




NORTH ELEVATION

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NOTE:
1. FOR NOTES SEE DRAWING H-2-118080.

0 5 10 15 20
REDUCED PRINT SCALE

| | | | |
|---|---|---|---|
| 0 | ADDED DOOR AT NORTH ELEV. AND RELEASED FOR PROJECT BASELINE (DRAFT) - REV. CA HQ. NWMP-DRAFT | | |
| CD | RELEASED FOR DETAILED DESIGN | | |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
NORTH & SOUTH ELEVATIONS

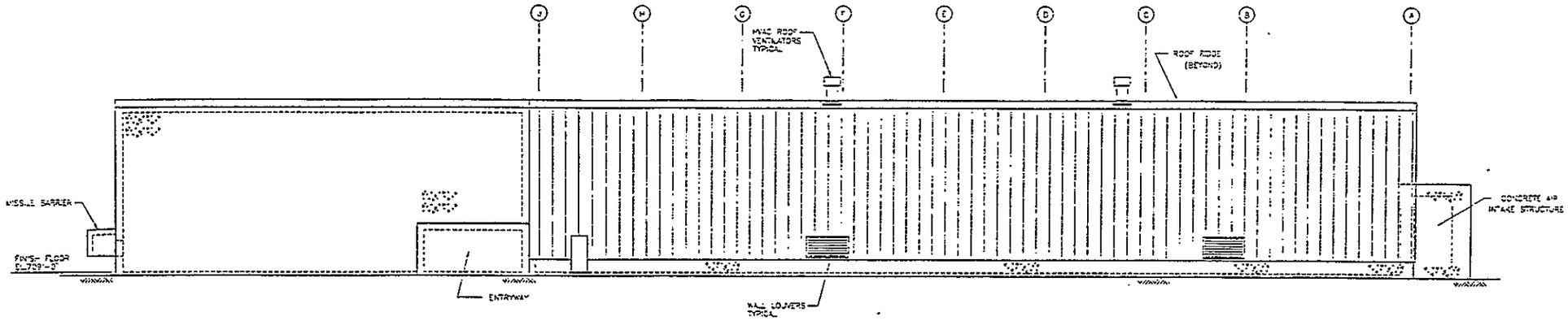
HANFORD WASTE VITRIFICATION PLANT

B-595 | 845724 | 3107
5

NONE | NOT REQ'D | H-2-118085 | 1 | 1 | 0

AUTOCAD

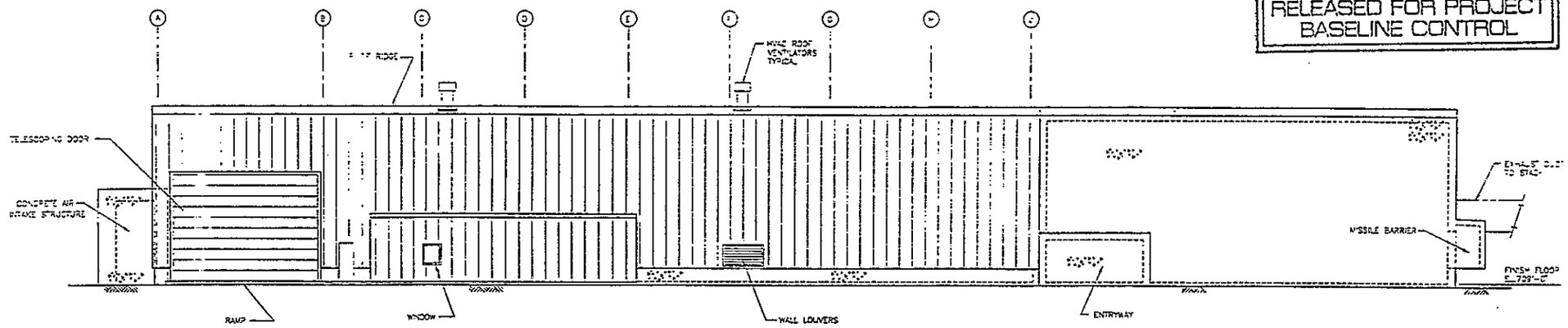
6112114116




EAST ELEVATION

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL




OCT 26 1990

WEST ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-118080.

0 5 10 15 20
REDUCED PRINT SCALE

| | | | |
|---|---|---|---|
| 0 | REVISED PER CHANGE NOTICE AS NOTED ELEV. LANE REMARKS FOR PROJECT BASELINE CONTROL PER CR NE-MAY-90-0041 | | |
| 00 | RELEASED FOR DETAILED DESIGN | | |

ENGINEERING RELEASE
REV. ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
CANISTER STORAGE BUILDING
EAST & WEST ELEVATIONS

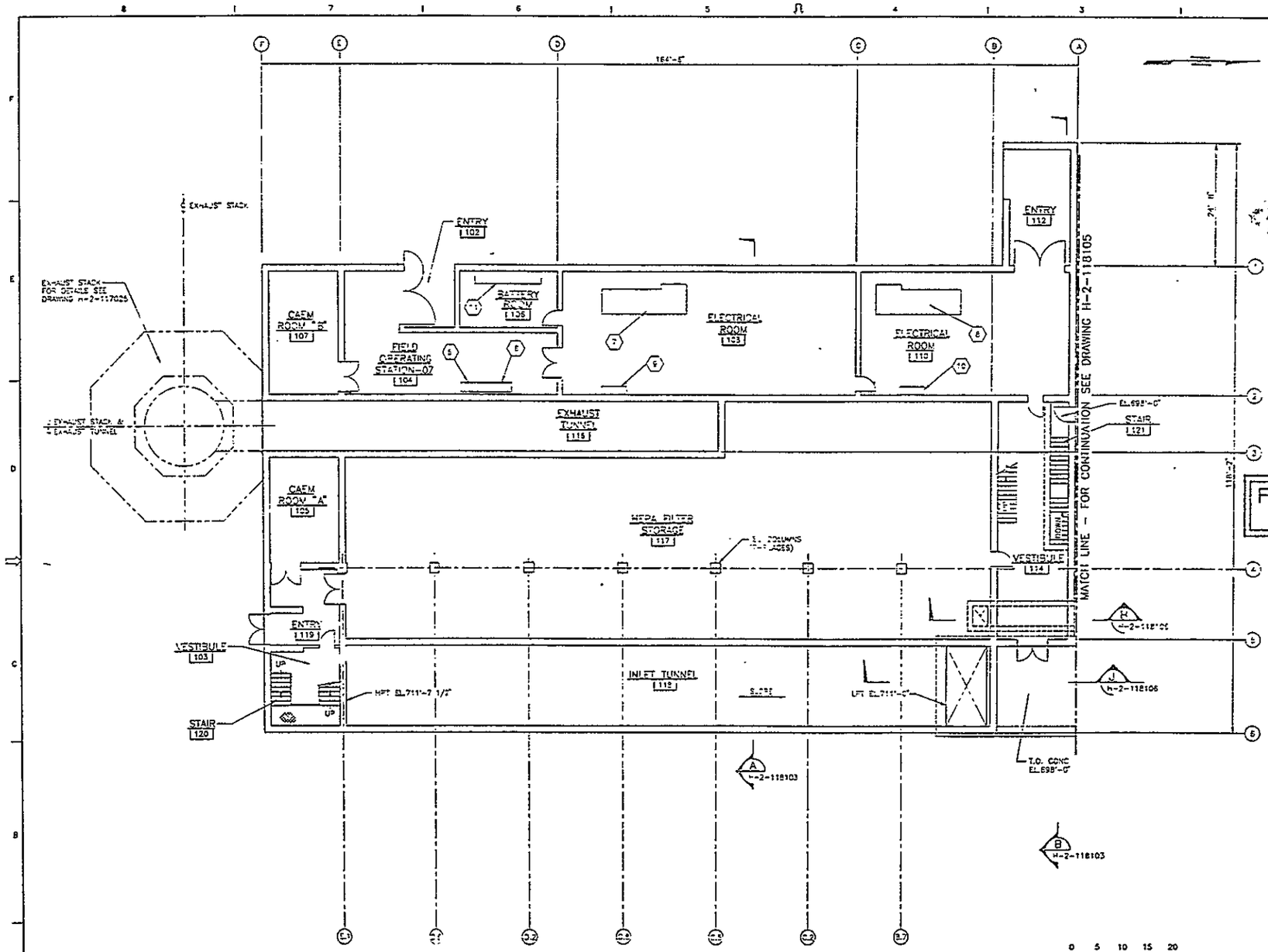
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 8-595 | 845724 | 3107 | |
| 1/8"=1'-0" | 5 | | |
| NONE | NOT REQ'D | H-2-118086 | 1 1 0 |

AUTOCAD

SD218068
17 AUG 90
LCO = CCF

9112120




FIRST FLOOR PLAN - EL.711'-0"
UNLESS NOTED OTHERWISE

NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

| ITEM (QC) | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 5 | 104-610-4044 | 18'-6" | DISTRIBUTED PROCESSING UNIT |
| 6 | 104-610-4048 | 18'-6" | DISTRIBUTED PROCESSING UNIT |
| 7 | 112-334-321 | 17'-10" | 480V STANDBY LOAD CENTER |
| 8 | 110-334-321 | 17'-10" | 480V STANDBY LOAD CENTER |
| 9 | 110-334-321 | 17'-6" | 480V MOTOR CONTROL CENTER STANDBY |
| 10 | 110-334-321 | 17'-6" | 480V MOTOR CONTROL CENTER STANDBY |
| 11 | 106-354-321 | 13'-0" | BATTERY RACK |

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NORTH

THIS DRAWING | H-2-118105

KEY PLAN
SCALE: NONE

| REV | DATE | DESCRIPTION | DRN | CHK | ENGR | PM |
|---|---|---|---|---|---|---|
| C | | ADDED DOUBLE DOOR @ RM 112 PER CR 441 | JRR / JLS | PRG / FGB | RPK / OPC | ERJ / RNC |
| D1 | | ADDED DOUBLE DOOR @ RM 112 PER CR 441 | JRR / JLS | PRG / FGB | RPK / OPC | ERJ / RNC |
| D0 | | RELEASED FOR DETAILED DESIGN | CWW / CDC | PRG / FGB | PRG / OPC | ERJ / RNC |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-84RL1030

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

R. GIBBONS 8/23/90
D. CHAVLA 8/23/90
J. BROOKS 8/23/90
C. GUENTHER 8/23/90
E. JACOBS 8/23/90
P. GRANT 8/23/90
P. GRANT 8/23/90
C. FAULKNER 8/23/90
C. WASSON 8/23/90

GENERAL ARRANGEMENT
FAN HOUSE
FIRST FLOOR PLAN

HANFORD WASTE VITRIFICATION PLANT

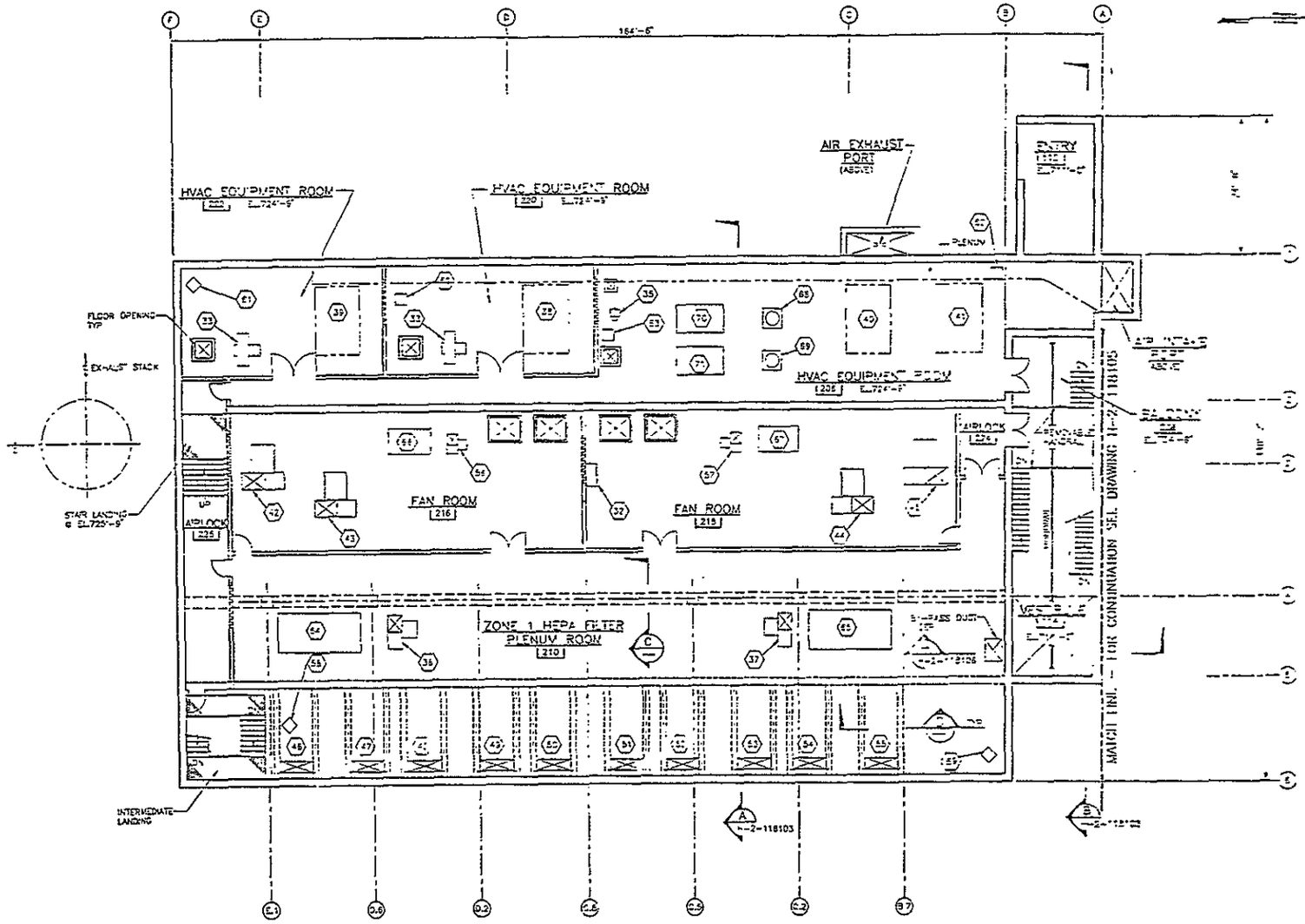
| DWG NO. | SCALE | SHEET | SHEET NO. | DWG NO. | REV |
|---|---|---|---|---|---|
| 8-595 | 1/8"=1'-0" | 7 | 845724 | 3107 | |

| NONE | NOT REQ'D | H-2-118100 | 1 | 1 | 0 |
|---|---|---|---|---|---|

AUTOCAD 1 F7218100 18 OCT 90 LCD = V.K.

BEST AVAILABLE COPY

9112171016




SECOND FLOOR PLAN — EL 720'-6"
UNLESS NOTED OTHERWISE

SECTION C
SCALE: 3/8" = 1'-0"

SECTION D
SCALE: 3/8" = 1'-0"

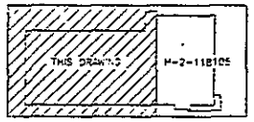
BEST AVAILABLE COPY

NOTES:
1. FOR NOTES SEE DRAWING H-2-118100.

EQUIPMENT LIST

| REV | EQUIPMENT NUMBER | HOOKUP | DESCRIPTION |
|---|---|---|---|
| 32 | HV-670-749 | 3"-0" | BETA GAMMA FAN |
| 33 | BL-256-741 | 10"-0" | ELECT HVAC EQUIP RM RETURN/EXHAUST FAN |
| 34 | BL-256-742 | 10"-0" | ELECT HVAC EQUIP RM RETURN/EXHAUST FAN |
| 35 | BL-256-731 | 10"-0" | BATTERY RM #1236 EXHAUST FAN |
| 36 | BL-256-73* | 10"-0" | FAN HOUSE RM'S RETURN/EXHAUST FAN |
| 37 | BL-256-732 | 10"-0" | FAN HOUSE RM'S RETURN/EXHAUST FAN |
| 38 | AH-257-721 | 8"-0" | SUPPLY AIR FAN |
| 39 | AH-257-722 | 8"-0" | SUPPLY AIR FAN |
| 40 | AH-257-711 | 11"-0" | EVAPORATIVE COOLER |
| 41 | AH-257-712 | 11"-0" | EVAPORATIVE COOLER |
| 42 | BL-256-721 | 8"-0" | ZONE 1 TRAIN "A" EXHAUST FAN |
| 43 | BL-256-722 | 8"-0" | ZONE 1 TRAIN "A" EXHAUST FAN |
| 44 | BL-256-723 | 8"-0" | ZONE 1 TRAIN "B" EXHAUST FAN |
| 45 | BL-256-724 | 8"-0" | ZONE 1 TRAIN "B" EXHAUST FAN |
| 46 | HV-256-707 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 47 | HV-256-722 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 48 | HV-256-733 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 49 | HV-256-708 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 50 | HV-256-723 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 51 | HV-256-709 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 52 | HV-256-707 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 53 | HV-256-708 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 54 | HV-256-709 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 55 | HV-256-710 | 11"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 56 | AH-257-761 | 3"-0" | EMERGENCY AHU FCU FAN RM #1216 |
| 57 | AH-257-762 | 3"-0" | EMERGENCY AHU FCU FAN RM #1216 |
| 58 | AH-257-711 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 59 | AH-257-712 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 60 | AH-257-713 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 61 | AH-257-714 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 62 | AH-257-715 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 63 | AH-257-716 | 3"-0" | CEILING MOUNTED ELEC UNIT HEATER |
| 64 | HV-256-73* | 8"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 65 | HV-256-732 | 8"-0" | ZONE 1 EXHAUST FILTER PLENUM |
| 66 | HV-257-751 | 8"-0" | EMERGENCY INTAKE FILTER PLENUM RM #1216 |
| 67 | HV-257-752 | 8"-0" | EMERGENCY INTAKE FILTER PLENUM RM #1216 |
| 68 | FM-620-064A1 | 3"-0" | FAN HOUSE HPS VAC SYSTEM HEPA FILTER |
| 69 | FM-620-064B1 | 3"-0" | FAN HOUSE HPS VAC SYSTEM HEPA FILTER |
| 70 | VM-220-064A | 3"-0" | FAN HOUSE HPS VACUUM BLOWER |
| 71 | VM-620-064B | 3"-0" | FAN HOUSE HPS VACUUM BLOWER |

RELEASED FOR PROJECT BASELINE CONTROL




KEY PLAN
SCALE: NONE

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

| REV | DATE | DESCRIPTION | DRAWN | CHK'D |
|---|---|---|---|---|
| 0 | 10/26/90 | REV RM 208,210,216,218 ADDED RM 224 EQUIP NO 64 THRU 71 CHANGED DWG #1236 EQUIP NO 64 THRU 71 CHANGED DWG #1235 WALLS @ RM 220 & 222 TO STUD WALLS DELETED RM 212 & RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. HNW-0842 | | |
| 00 | 02/28/90 | RELEASED FOR DETAILED DESIGN | DWK | RPK |
| | | | JJS | FGS |

UNDERGOING RELEASE
REV. ____ DATE ____
ECO ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

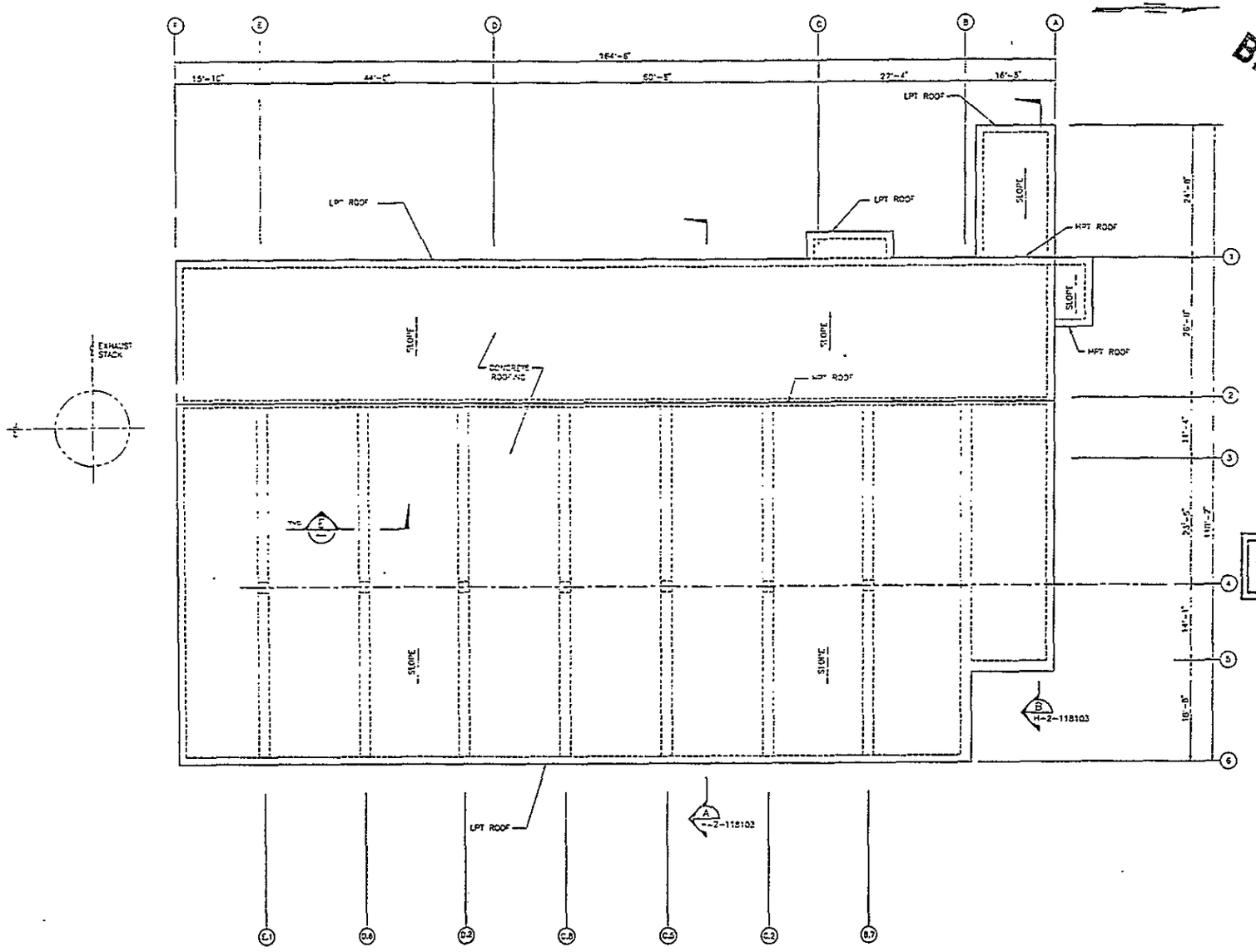
| | | |
|---|---|---|
| DRAWN BY | R. GIBBONS | 8/20/90 |
| CHECKED BY | D. CHAKKA | 8/20/90 |
| | F. BROOKS | 8/20/90 |
| | J. SMETS | 8/20/90 |
| | E. JACOBS | 8/20/90 |
| | R. KUMAR | 8/20/90 |
| | P. GRANT | 8/20/90 |
| | C. FAULKNER | 8/20/90 |
| | C. WASSON | 8/20/90 |

GENERAL ARRANGEMENT
FAN HOUSE
SECOND FLOOR PLAN

HANFORD WASTE VITRIFICATION PLANT

SCALE: 1/8" = 1'-0"
SHEET 7
NONE | NOT REQ'D | H-2-118101 | 1 | 0

AUTOCAD
02218101
19 OCT 90
LCD = CDT



SECTION E
3/8" = 1'-0"

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:

1. FOR NOTES SEE DWG H-2-118100.

| | |
|---|---|
| 0 | RELEASED FOR PROJECT BASELINE |
| 00 | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____
DIC ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FAN HOUSE
ROOF PLAN

HANFORD WASTE VITRIFICATION PLANT

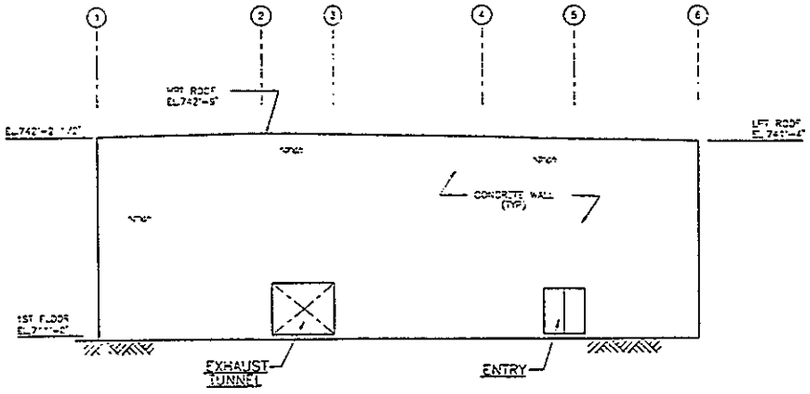
H-595 | 3107
1/8"=1'-0" | 7

NONE | NOT REQ'D | H-2-118102 | C

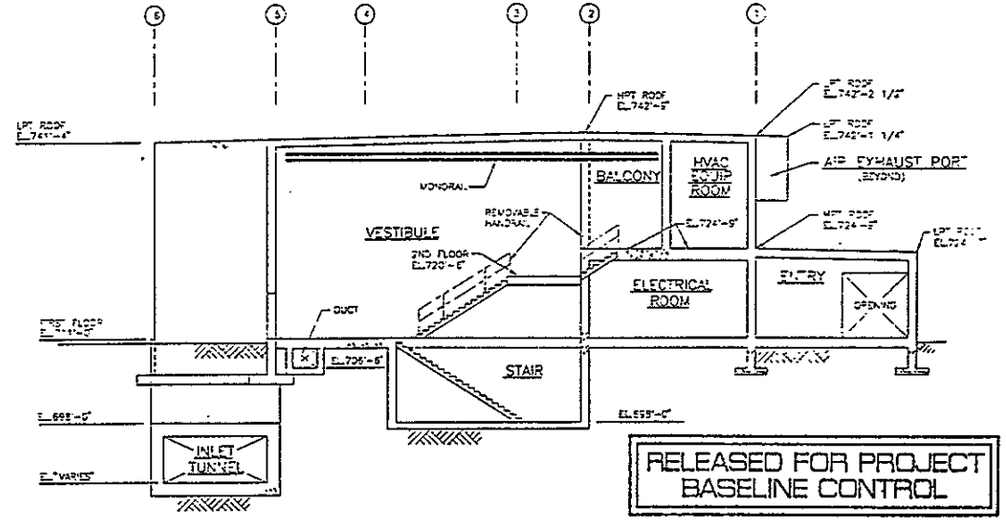
AUTOCAD

D0218102
16 AUG 90
LCD = CWW

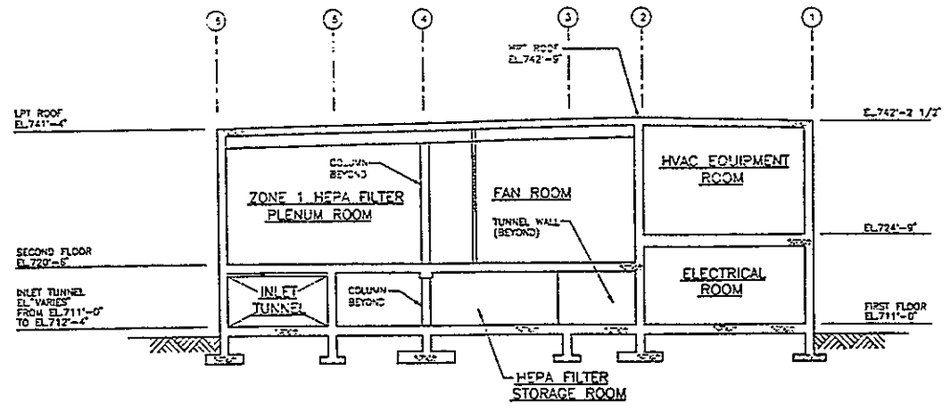
9 1 1 2 1 1 1 0 3




SOUTH ELEVATION




SECTION B H-2-118100 THRU H-2-118102




SECTION A H-2-118100 THRU H-2-118102

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DWG H-2-118100.

| | | | |
|---|---|---|---|
| 0 | | HOOD WITHOUT DOOR OPNG & REV 5 TO 9 IN NOTES 2 & BALCONY LENGTH REDUCED 7'-0" & RELEASED FOR PROJECT BASELINE CONTROL (PER CP NO 1990-0047) | CWW/DF/PG/RP/FRJ |
| CC | 02/22/90 | RELEASED FOR DETAILED DESIGN | CWW/DF/PG/RP/FRJ JLS/FGB/CPC/RHG |

ENGINEERING RELEASE
REV. ____ DATE ____
ENG. ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE — 300-AREA, HOUSE

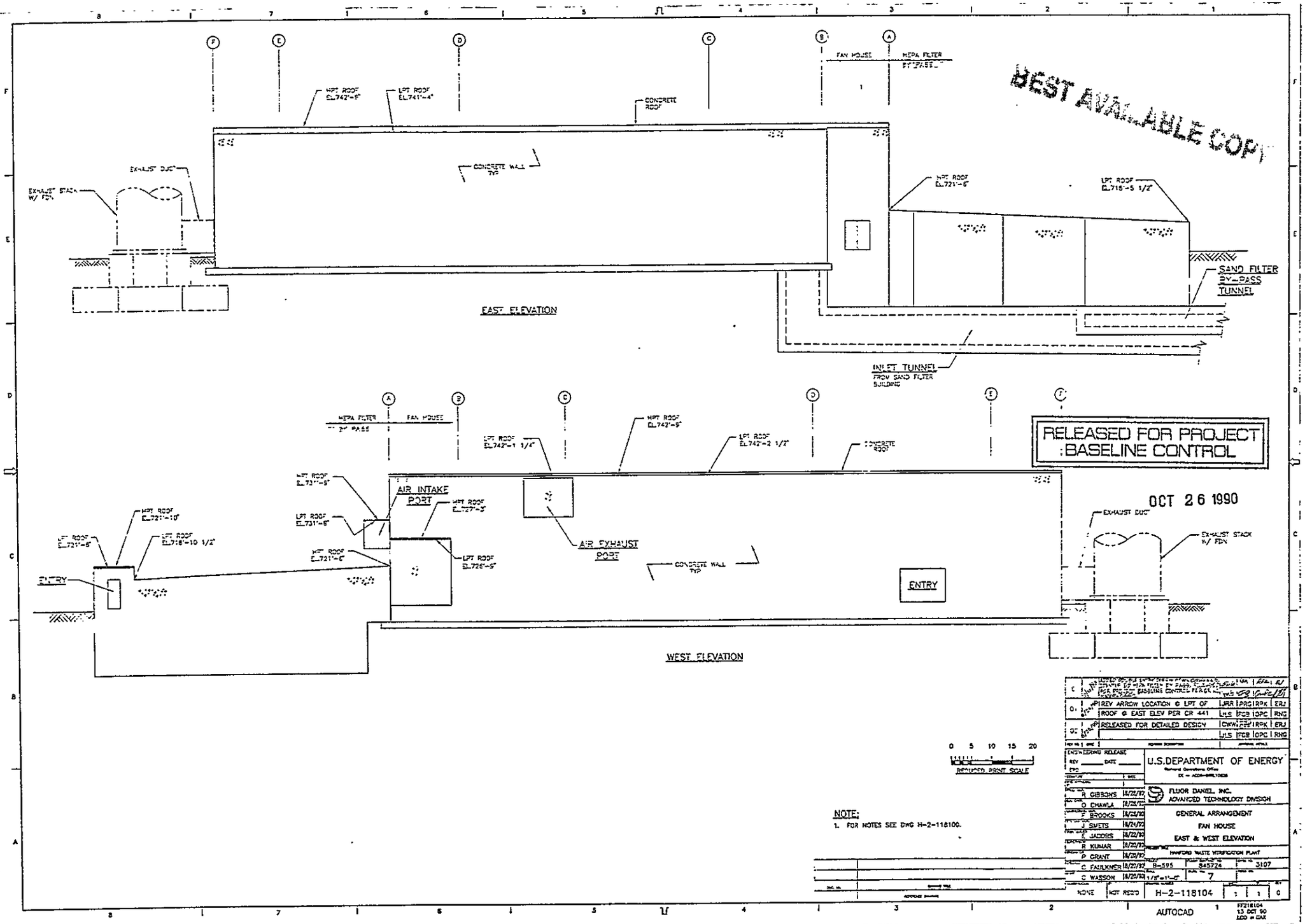
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

| | | |
|---|---|---|
| R. GIBBONS | 8/24/90 | |
| C. CHAWLA | 8/24/90 | |
| F. BROOKS | 8/24/90 | |
| J. SMETS | 8/24/90 | |
| E. JACOBS | 8/22/90 | |
| R. KUMAR | 8/22/90 | |
| P. GRANT | 8/22/90 | |
| C. FAULKNER | 8/20/90 | E-595 |
| C. WASSON | 8/20/90 | 1/8"=1'-0" |

GENERAL ARRANGEMENT
FAN HOUSE
SOUTH ELEVATION & SECTION

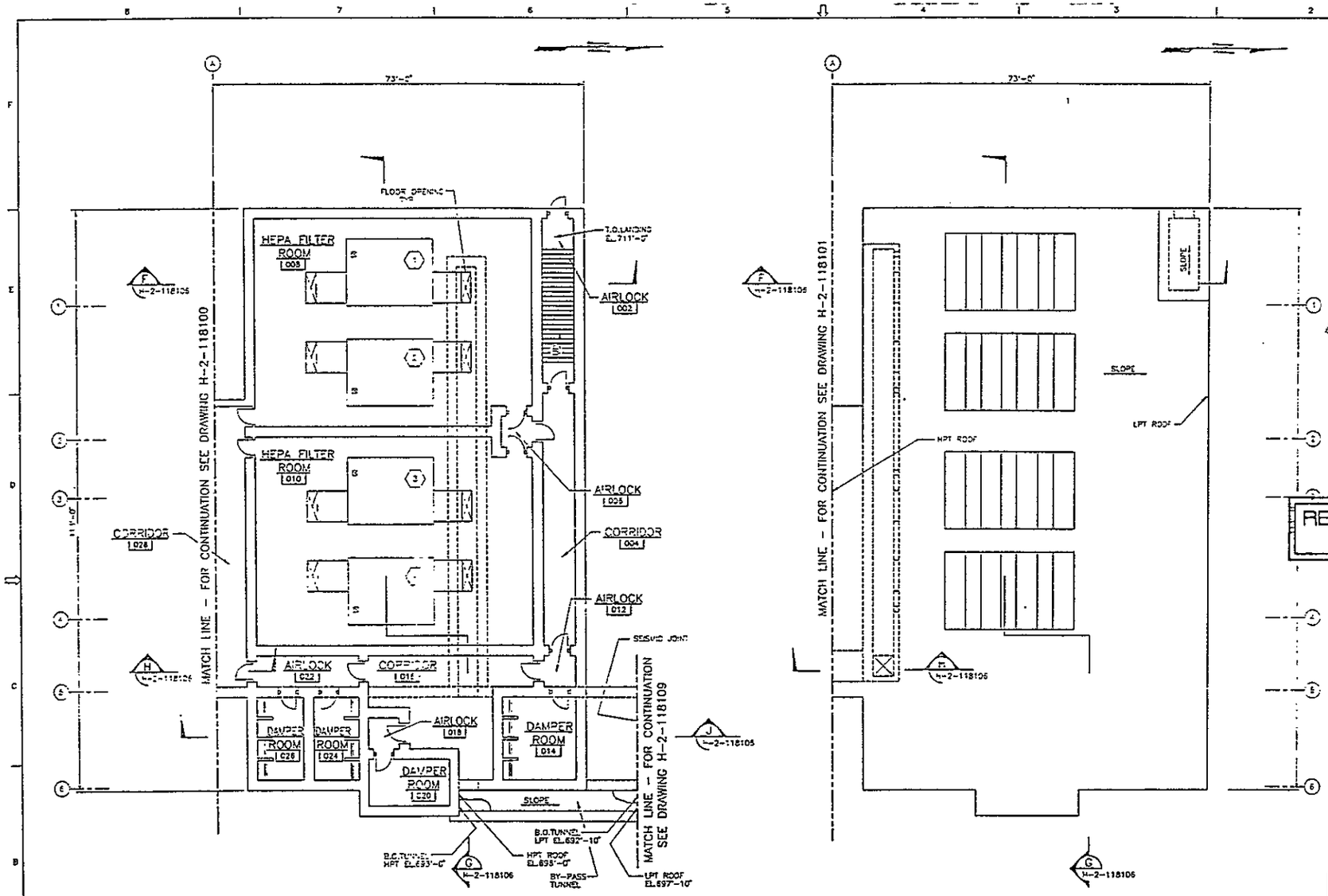
HANFORD WASTE VITRIFICATION PLANT
PROJECT NO. 845724
DRAWING NO. 3-107
SHEET NO. 7
NONE | NOT REQ'D | H-2-118103 | 1 | 1 | 0

AUTOCAD
EE218103
18 OCT 90
LDO = CDF




BEST AVAILABLE COPY

9 1 1 2 1 7 1 3 5




FLOOR PLAN EL 698'-0" UNLESS NOTED

ROOF PLAN

NOTE:
1. FOR NOTES SEE DRAWING H-2-118100.

EQUIPMENT LIST

| EQUIPMENT NUMBER | HOOD # | DESCRIPTION |
|---|---|---|
| 1 - PF-256A-712 | 111'-0" | BY-PASS HEPA FILTER PLENUM |
| 2 - PF-256B-714 | 111'-0" | BY-PASS HEPA FILTER PLENUM |
| 3 - PF-256A-713 | 111'-0" | BY-PASS HEPA FILTER PLENUM |
| 4 - PF-256B-716 | 111'-0" | BY-PASS HEPA FILTER PLENUM |

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NORTH

KEY PLAN
SCALE: NONE

0 5 10 15 20
ACTUAL PRINT SCALE

| REV. | DATE | DESCRIPTION | APPROVAL |
|---|---|---|---|
| 0 | | RELEASED FOR PROJECT BASELINE CONTROL, FOR CR NO HAZARDS | |
| 00 | 10/22/90 | RELEASED FOR DETAILED DESIGN | CWW CJ/PD RPK ERJ JLS FGS DPC RWG |

ENGINEERING RELEASE
REV. ____ DATE ____

U.S.DEPARTMENT OF ENERGY
Richland Operations Office
DE - RL

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FAN HOUSE
HEPA FILTER BY-PASS PLANS

HANFORD WASTE VITRIFICATION PLANT

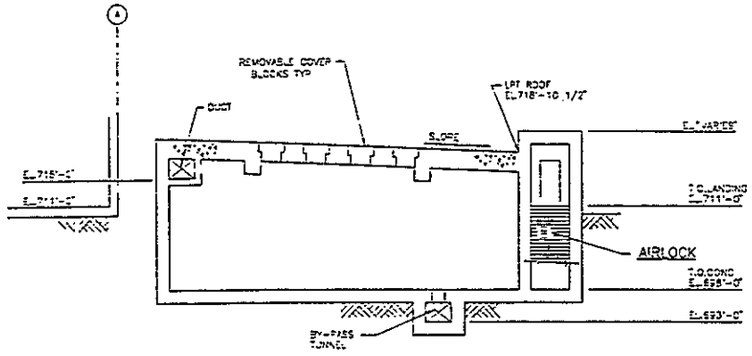
| | | |
|---|---|---|
| D. GIBBONS | 10/22/90 | |
| C. CHAKLA | 10/22/90 | |
| E. BROOKS | 10/22/90 | |
| J. SMETS | 10/22/90 | |
| E. JACOBS | 10/22/90 | |
| R. KUMAR | 10/22/90 | |
| P. GRANT | 10/22/90 | |
| G. FAULKNER | 10/22/90 | |
| C. WASSON | 10/22/90 | |

PROJECT NO. 2-595 | DRAWING NO. 545724 | SHEET NO. 3107
SCALE 1/8"=1'-0" | SHEET NO. 7

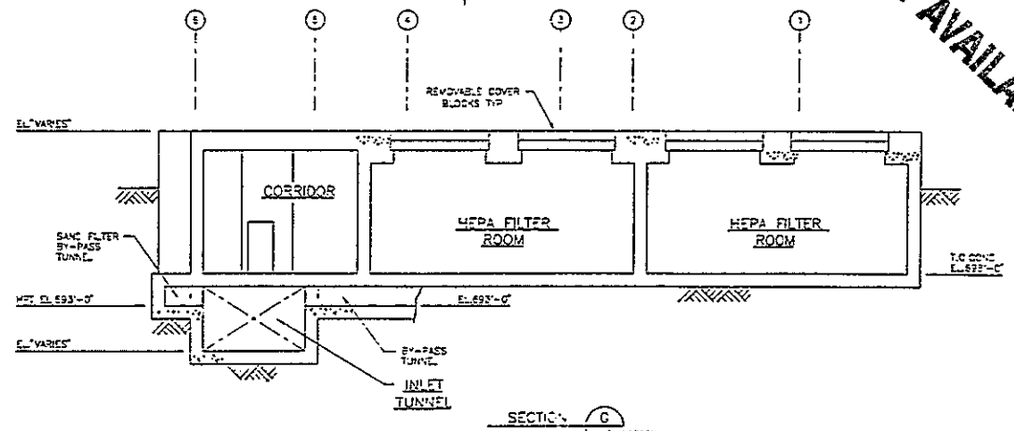
NONE | NOT REQ'D | H-2-118105 | 1 | 1 | 0

AUTOCAD 1 ECD118105 16 OCT 90 LED = V.X.

BEST AVAILABLE COPY

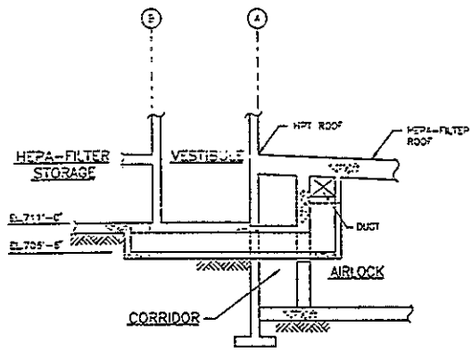



SECTION F
H-2-118105

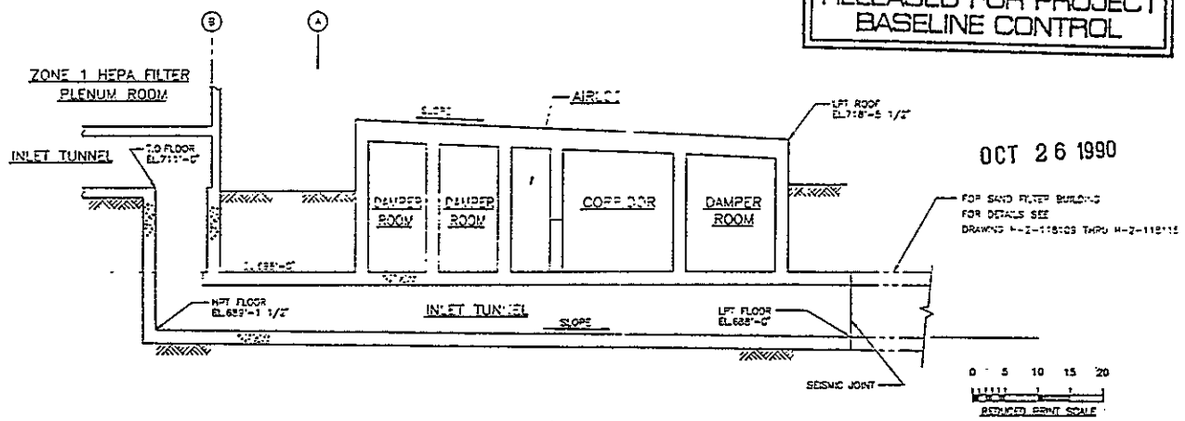



SECTION G
H-2-118105

RELEASED FOR PROJECT BASELINE CONTROL




SECTION H
H-2-118100, H-2-118101 & H-2-118105




OCT 26 1990

SECTION J
H-2-118100 & H-2-118105

NOTE:
1. FOR NOTES SEE DRAWING H-2-118100.

| REV | DATE | REVISION DESCRIPTION | APPROVAL DETAILS |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CRN NHP-0442. | |
| 01 | 10/30/90 | ADDED REF DWG CALLOUT AT SECTION H PER CR-441 | |
| 00 | 8/31/90 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV. ____ DATE ____
EDG

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
SE = ACON-ENGINEERING

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FAN HOUSE
HEPA FILTER BY-PASS SECTIONS

HANFORD WASTE VITRIFICATION PLANT

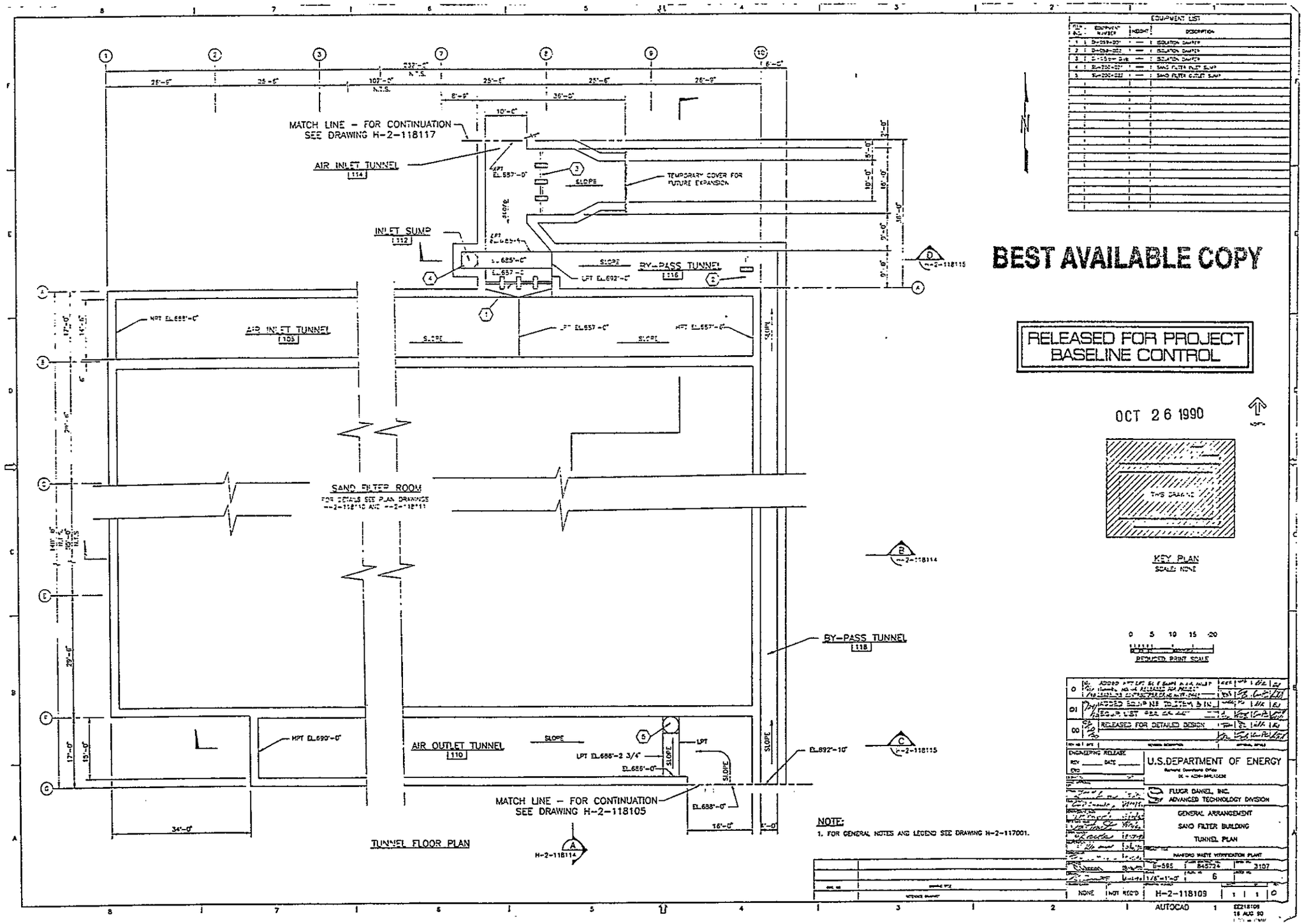
S-595 | 845724 | 3107
1/8"=1'-0" | 7

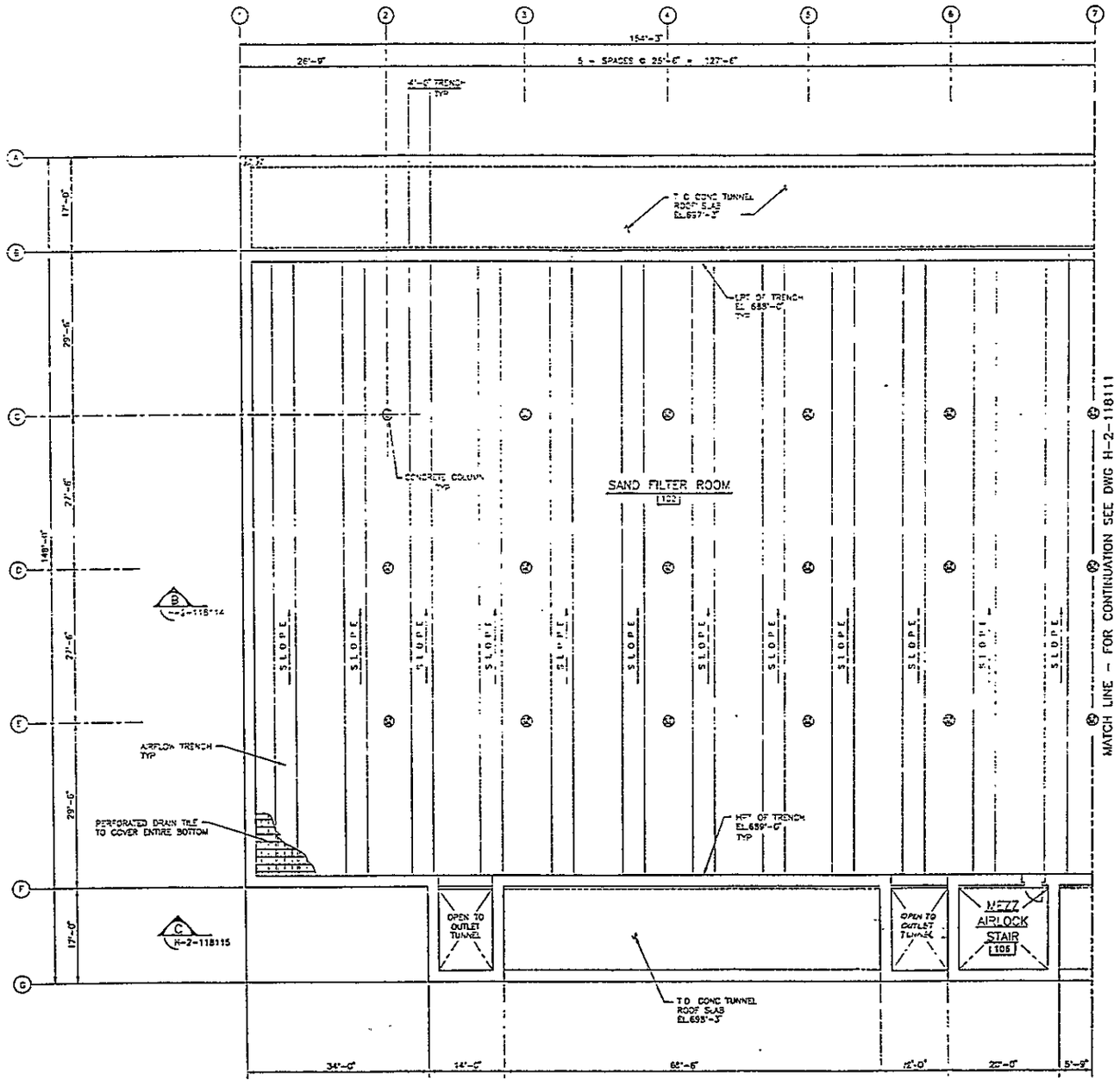
NONE | NOT REQD | H-2-118106 | 1 | 1 | C

AUTOCAD 1 00218106
20 AUG 90
EDG = V.K.

9 1 1 2 1 7 1 7 7

9 1 1 2 1 7 1 2 3


MATCH LINE – FOR CONTINUATION SEE DRAWING H-2-118117
AIR INLET TUNNEL 114
INLET SUMP 112
TEMPORARY COVER FOR FUTURE EXPANSION
BY-PASS TUNNEL 116
AIR INLET TUNNEL 105
SAND FILTER ROOM
FOR DETAILS SEE PLAN DRAWINGS H-2-118110 AND H-2-118111
AIR OUTLET TUNNEL 110
BY-PASS TUNNEL 118
MATCH LINE – FOR CONTINUATION SEE DRAWING H-2-118105
TUNNEL FLOOR PLAN
H-2-118114
H-2-118115
H-2-118314
N
EQUIPMENT LIST
BEST AVAILABLE COPY
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
KEY PLAN
SCALE: NONE
REDUCED PRINT SCALE
NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.
RELEASED FOR DETAILED DESIGN
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
SAND FILTER BUILDING
TUNNEL PLAN
HANFORD WASTE VITRIFICATION PLANT
H-2-118109
AUTOCAD



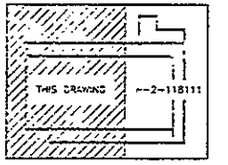

FLOOR PLAN – WEST END

ELEVATION 691'-6" UNLESS NOTED OTHERWISE

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118109

| | | |
|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
ECN

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

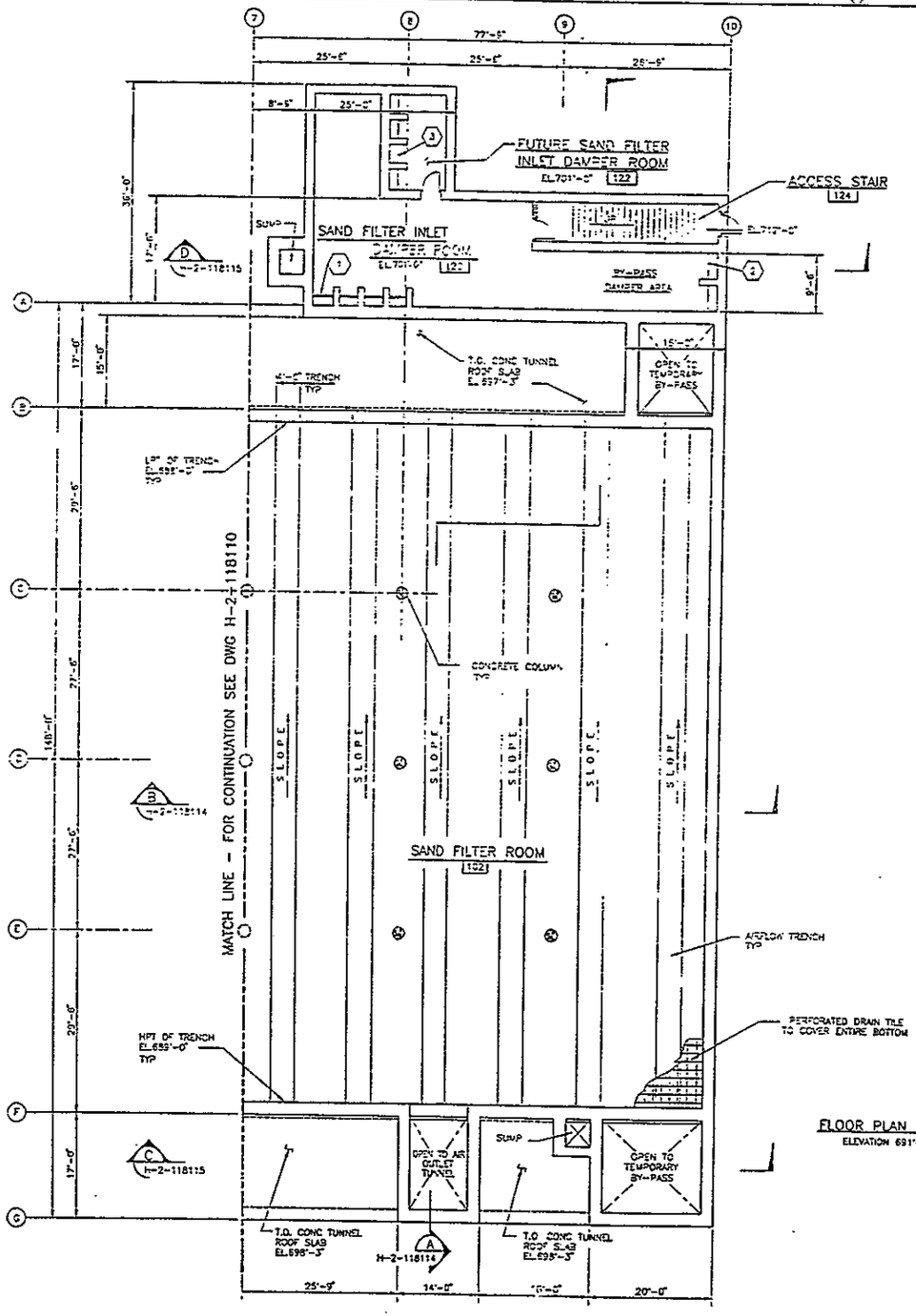
GENERAL ARRANGEMENT
SAND FILTER BUILDING
FLOOR PLAN – WEST END

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| 8-595 | 845724 | 3-77 |
| NONE | 1/8"=1'-0" | 6 |
| NONE | NOT REQ'D | H-2-118110 |

AUTOCAD 1 EC218110 15 AUG 90 LCD - CAF

9 1 1 2 1 1 0 6




FLOOR PLAN – EAST END

ELEVATION 691'-6" U.N.O.

NOTE:

1. FOR NOTES SEE DRAWING H-2-118105.

EQUIPMENT LIST

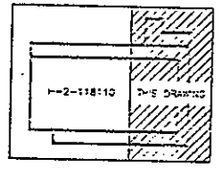
| FILM (NO) | EQUIPMENT NUMBER | HEIGHT | DESCRIPTION |
|---|---|---|---|
| 1 | D-059-001 | — | ISOLATION DAMPER |
| 2 | D-059-002 | — | ISOLATION DAMPER |
| 3 | — | — | ISOLATION DAMPER |

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NORTH




KEY PLAN

SCALE NONE

0 5 10 15 20

REDUCED PRINT SCALE

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | 11/1/90 | RELEASED FOR DETAILED DESIGN | |
| 00 | 10/26/90 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE

REV. ____ DATE ____

U.S. DEPARTMENT OF ENERGY

Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SAND FILTER BUILDING
FLOOR PLAN – EAST END

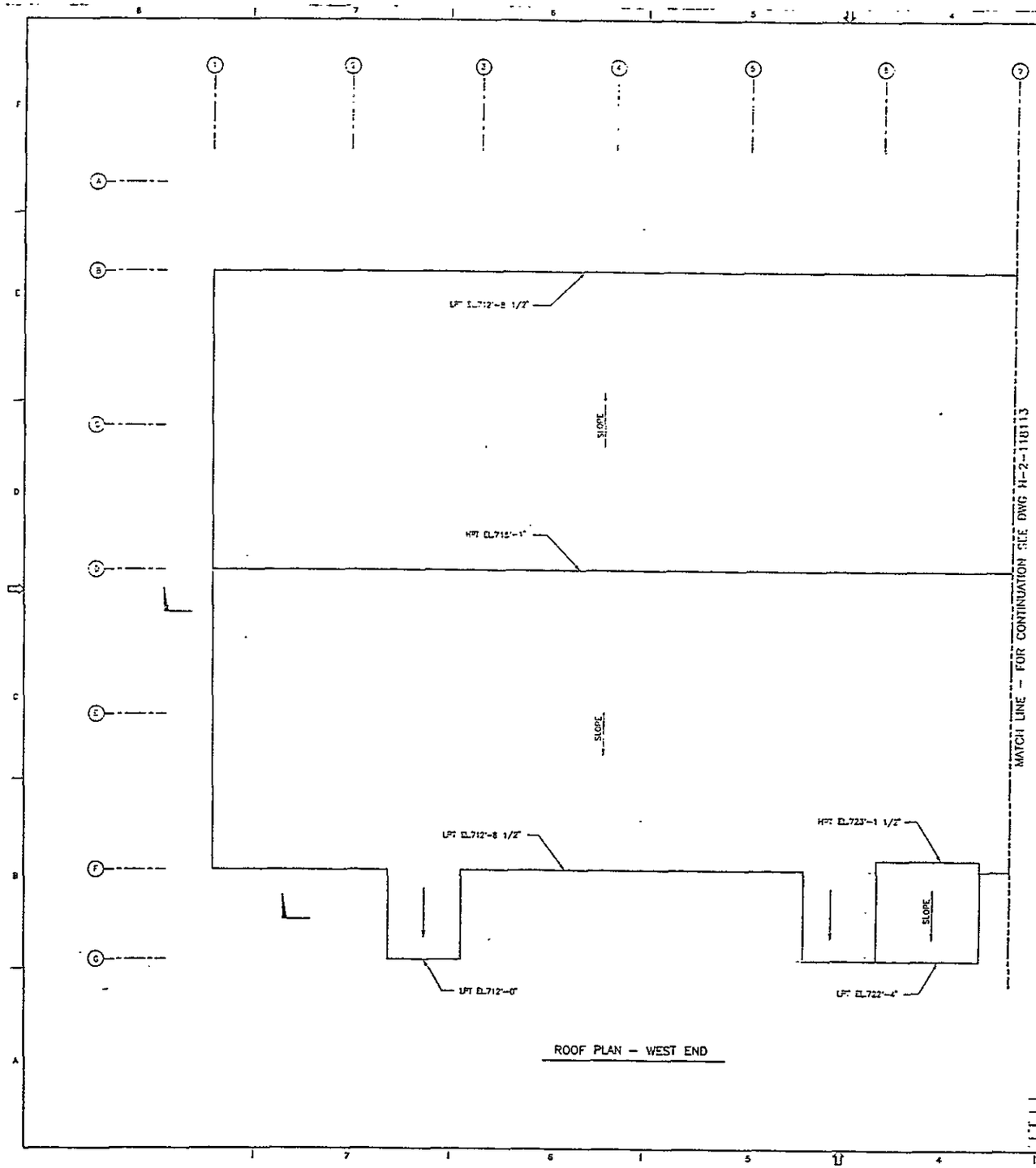
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 545724 | | 3107 |
| 1/8"=1'-0" | | | 6 |

NONE | NOT REQ'D | H-2-118111 | 1 | 1 | 0

AUTOCAD 1 EE218111 15 AUG 90

0 0 1 1 2 1 1 1 0 6



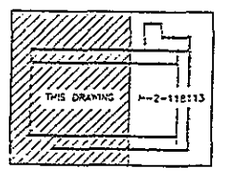

ROOF PLAN - WEST END

NOTE:
1. FOR NOTES SEE DRAWING H-2-118109.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE: NONE

0 5 10 15 20
REDUCED PRINT SCALE

| REV. | DATE | DESCRIPTION | DRN | CHK | APPR. |
|---|---|---|---|---|---|
| 0 | 10/1/90 | ISSUE ROOF LINE. RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. HNVP-90062. | | | |
| 01 | 12/21/90 | REVISED ALL PIPE RISERS THRU ROOF PER CR 90-44 | | | |
| 02 | 3/7/90 | RELEASED FOR DETAILED DESIGN | | | |

ENGINEERING RELEASE
REV. ____ DATE ____
CRD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SAND FILTER BUILDING
ROOF PLAN - WEST END

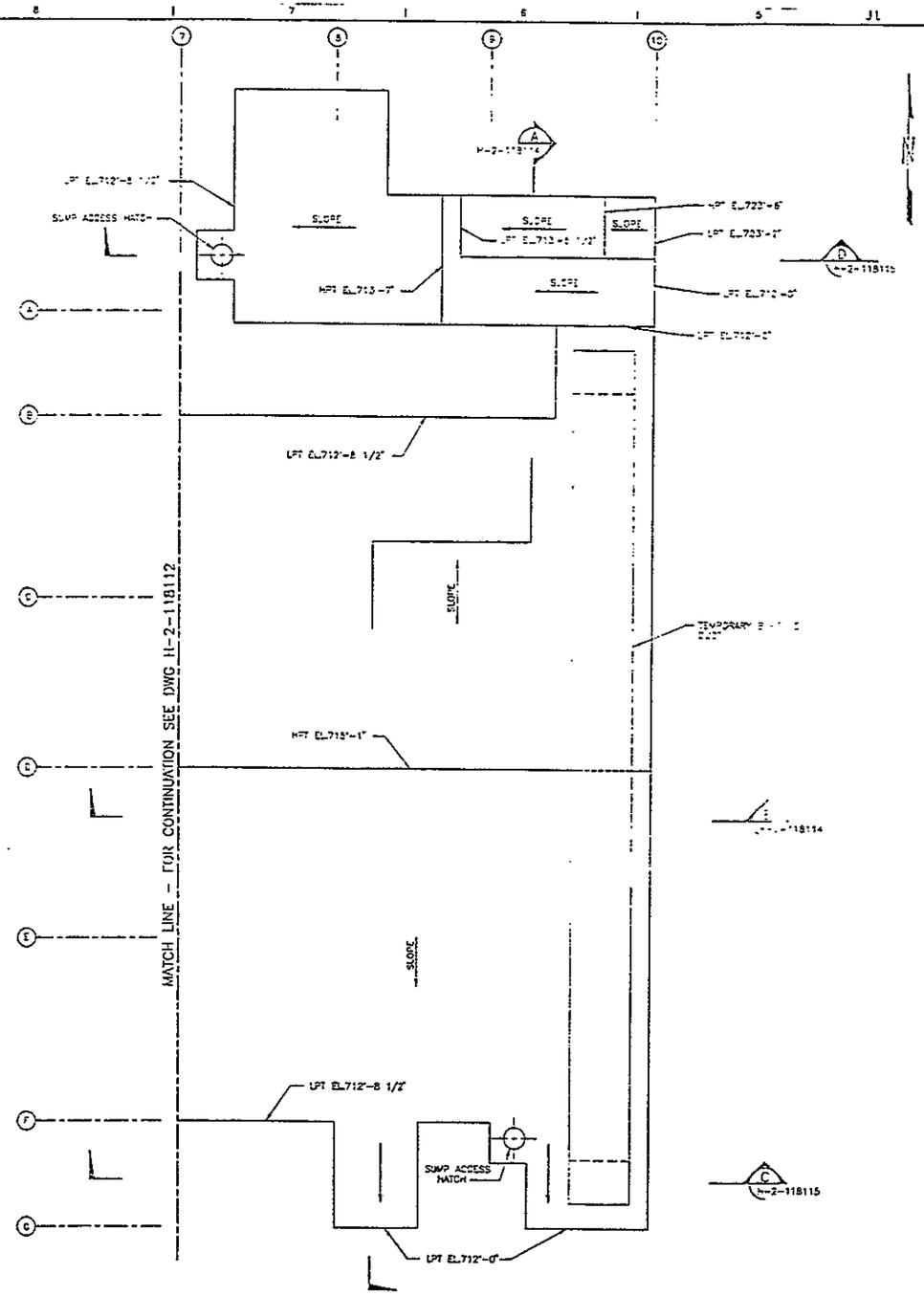
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| B-595 | 845724 | | 3107 |
| 1/8"=1'-0" | 6 | | |
| NONE | NOT REQ'D | H-2-118112 | 1 / 1 / C |

AUTOCAD

ES218112
14 AUG 90

9 1 1 2 1 1 1 1 1

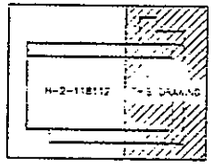



ROOF PLAN – EAST END

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




KEY PLAN
SCALE NONE

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118109.

| REV. NO. | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL FOR CAND INVF-DOED. | |
| 01 | 9/6/90 | REMOVED ALL PIPE SERG THRU ROOF PENET OR ADD. | |
| 00 | 7/7/90 | RELEASED FOR DETAILED DESIGN. | |

ENGINEERING RELEASE
REV. _____ DATE _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-88RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

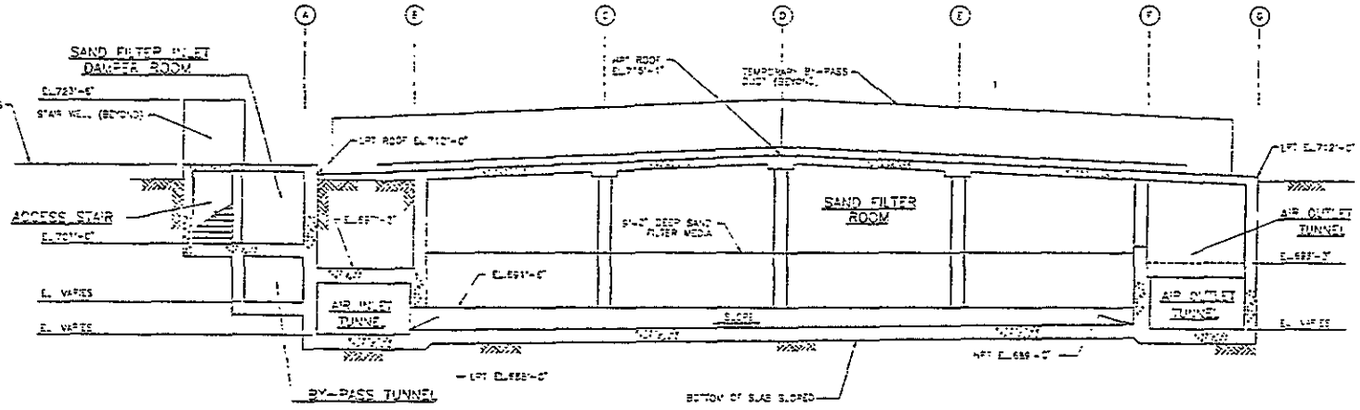
GENERAL ARRANGEMENT
SAND FILTER BUILDING
ROOF PLAN – EAST END

HANFORD WASTE VITRIFICATION PLANT

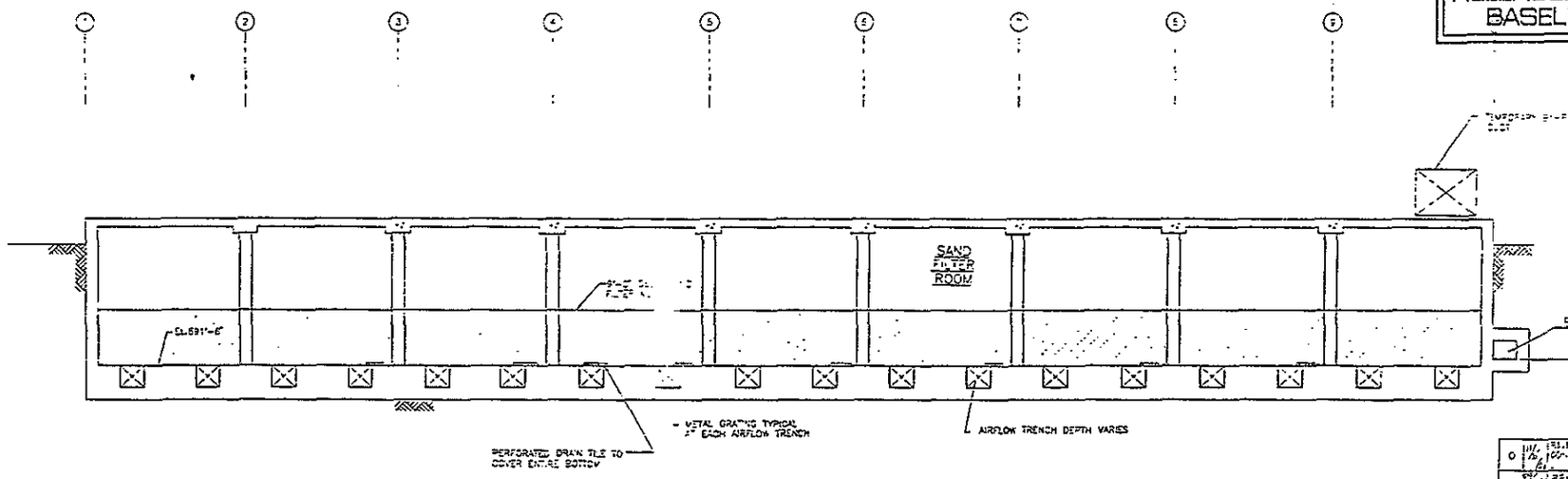
| | | | |
|---|---|---|---|
| 8-595 | 845724 | | 3107 |
| 1/8"=1'-0" | | 6 | |

NONE | NOT REC'D | H-2-118113 | 1 | 1 | 1 | 0

AUTOCAD 1 EE218113 15 AUG 90 LCD = CAT




SECTION A
H-2-118109, 111, 113




SECTION B
H-2-118109 THRU H-2-118113

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118109.

| REV NO | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. [illegible] | [illegible] |
| 01 | [illegible] | REMOVED ALL P&S & SEAL AT SECTION A & B PER CR [illegible] | [illegible] |
| 00 | 6/30/90 | RELEASED FOR DETAILED DESIGN | [illegible] |

ENGINEERING RELEASE
REV ____ DATE ____
EPC
SE - ACCEPTANCE

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
SE - ACCEPTANCE

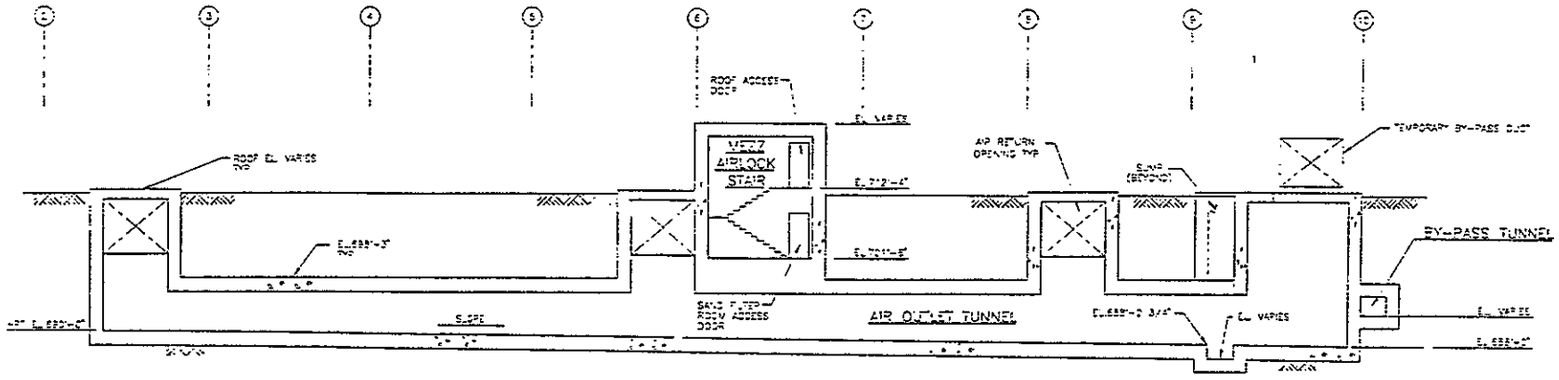
FLUOR DANIEL, INC
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SAND FILTER BUILDING
SECTIONS

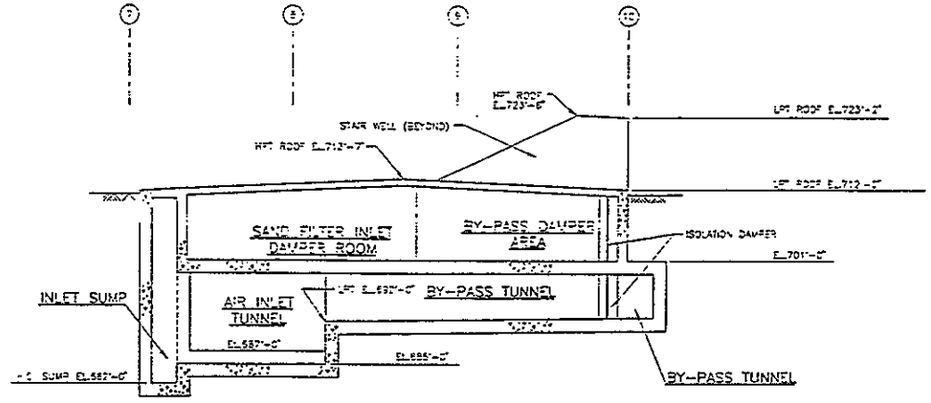
HANFORD WASTE VITRIFICATION PLANT
PROJECT NO. P-595 | 845774 | SHEET 6 | SHEET 3 OF 7

NONE | NOT REQ'D | H-2-118114 | 0

AUTOCAD




SECTION C
H-2-118109 THRU H-2-118113




SECTION D
H-2-118109,110,111 & 113

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

BEST AVAILABLE COPY

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118109.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 0 | | |
| 00 | | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____
EXP

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SAND FILTER BUILDING
SECTIONS

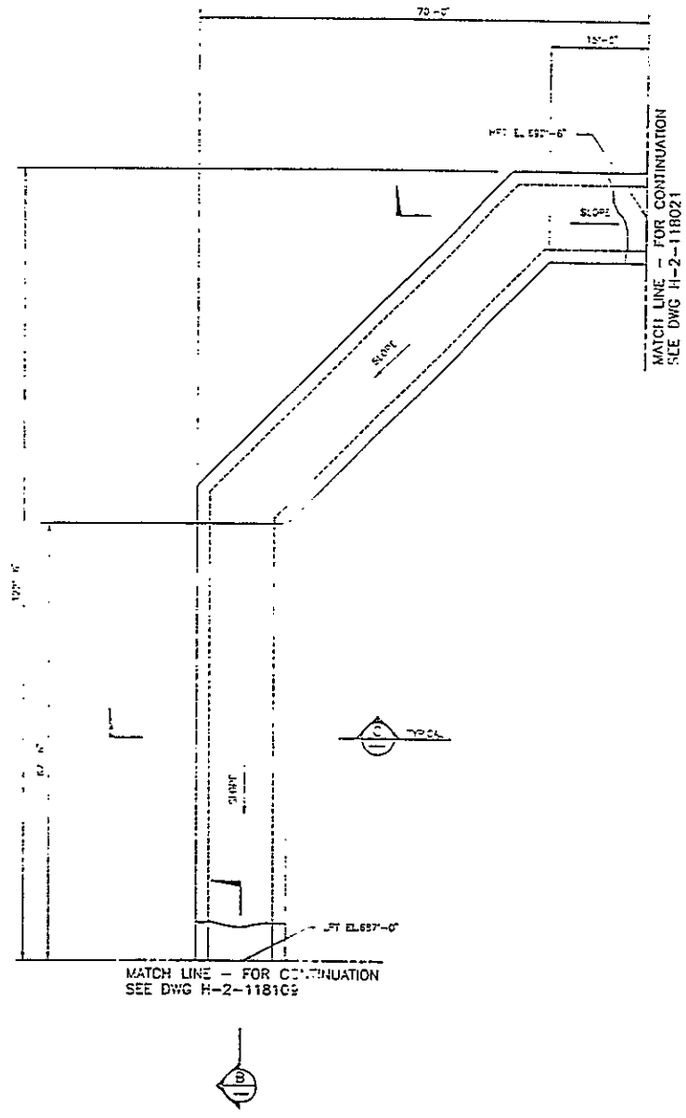
HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| 2-595 | 3107 | |
| 1/8"=1'-0" | 0 | |
| NONE | NOT REQ'D | H-2-118115 |

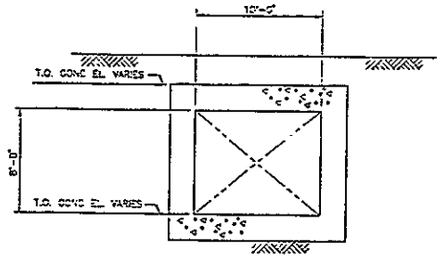
AUTOCAD

ED118115
18 AUG 90
LED = DWW

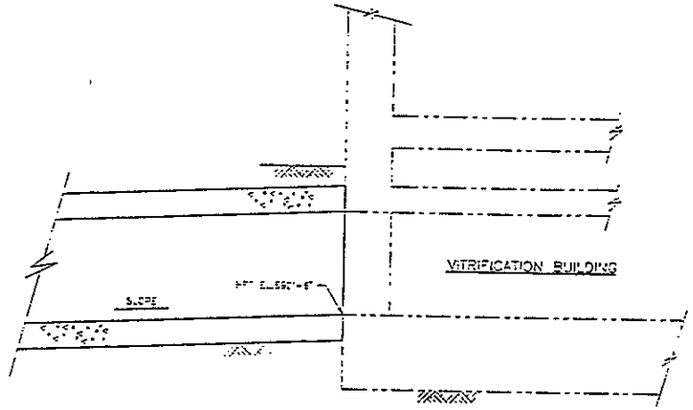
9112171 9



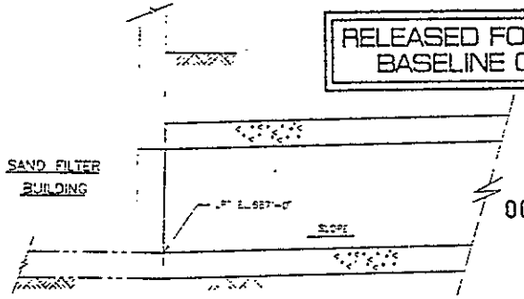

PLAN
SCALE: 1/8" = 1'-0"




SECTION C
SCALE: 1/4" = 1'-0"




SECTION A




SECTION B

BEST AVAILABLE COPY

RELEASED FOR PROJECT
BASELINE CONTROL

OCT 26 1990

REDUCED PRINT SCALE

REDUCED PLOT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-117001

| | | |
|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL PER CR 90 PW1/R0442. | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
ECO

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
RF – ACON-BATTELLE

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

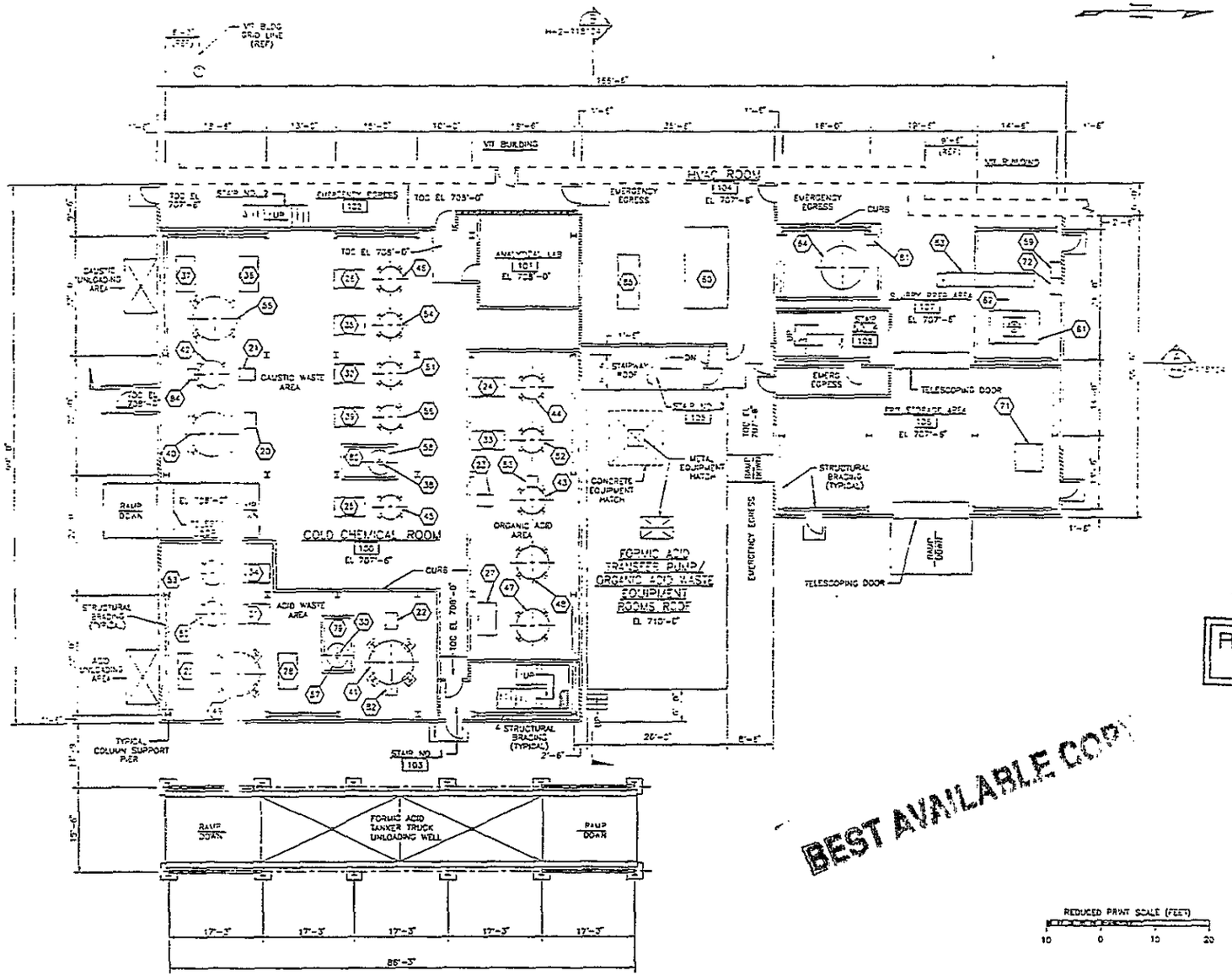
GENERAL ARRANGEMENT
INTERCONNECTING EXHAUST TUNNEL
PLAN AND SECTIONS

HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 18/8/90 | AS NOTED | 22 | |
| NONE | FNCT RCDD | H-2-118117 | |

AUTOCAD 1 EE218117
11 AUG 90
LCO = JAG

9112117.5




| EQUIPMENT LIST | | | |
|---|---|---|---|
| ITEM NO. | EQUIPMENT NUMBER | WEIGHT (LBS) | DESCRIPTION |
| 20 | PX-530-001 | X | CAUSTIC WASTE HOLD TANK TRANSFER PUMP |
| 21 | PX-530-003 | X | CAUSTIC WASTE NEUT TANK TRANSFER PUMP |
| 22 | PX-530-004 | X | ACID WASTE HOLD TANK TRANSFER PUMP |
| 23 | PX-530-005 | X | ACID WASTE NEUT TANK TRANSFER PUMP |
| 24 | PX-540-001 | X | SLURRY SOLUTION TRANSFER PUMP |
| 25 | PX-540-003 | X | OFFGAS TREATMENT CHEMICAL TRANSFER PUMP |
| 26 | PX-540-005 | X | KOH/FRIT MODIFIER TRANSFER PUMP |
| 27 | PX-540-011 | X | DILUTE FORMIC ACID TRANSFER PUMP |
| 28 | PX-540-013 | X | 15% NITRIC ACID TRANSFER PUMP |
| 29 | PX-540-014 | X | 15% NITRIC ACID UNLOADING PUMP |
| 30 | PX-540-016 | X | NITRIC ACID SUMP PUMP |
| 31 | PX-540-017 | X | NITRIC ACID DECON TRANSFER PUMP |
| 32 | PX-540-019 | X | DECON SOLUTION TRANSFER PUMP |
| 33 | PX-540-035 | X | ORGANIC ACID DECON TRANSFER PUMP |
| 34 | PX-540-037 | X | POTASSIUM PERMANGANATE TRANSFER PUMP |
| 35 | PX-540-024 | X | SODIUM NITRITE TRANSFER PUMP |
| 36 | PX-540-026 | X | 15% CAUSTIC TRANSFER PUMP |
| 37 | PX-540-027 | X | 15% CAUSTIC UNLOADING PUMP |
| 38 | PX-540-028 | X | CAUSTIC SUMP PUMP |
| 39 | PX-540-035 | X | 10WT% SODIUM HYDROXIDE TRANSFER PUMP |
| 40 | TK-530-001 | X | CAUSTIC WASTE HOLD TANK |
| 41 | TK-530-003 | X | ACID WASTE HOLD TANK |
| 42 | TK-530-005 | X | CAUSTIC WASTE NEUTRALIZATION TANK |
| 43 | TK-530-006 | X | ORGANIC ACID WASTE NEUTRALIZATION TANK |
| 44 | TK-540-001 | X | SLURRY SOLUTION MAKE-UP TANK |
| 45 | TK-540-003 | X | OFFGAS TREATMENT CHEMICAL MAKE-UP TANK |
| 46 | TK-540-005 | X | KOH/FRIT MODIFIER MAKE-UP TANK |
| 47 | TK-540-007 | X | FORMIC ACID DILUTION TANK |
| 48 | TK-540-010 | X | DILUTE FORMIC ACID FEED TANK |
| 49 | TK-540-011 | X | 15% NITRIC ACID STORAGE TANK |
| 50 | TK-540-013 | X | NITRIC ACID DECON MAKE-UP TANK |
| 51 | TK-540-018 | X | DECON SOLUTION MAKE-UP TANK |
| 52 | TK-540-016 | X | ORGANIC ACID DECON MAKE-UP TANK |
| 53 | TK-540-018 | X | POTASSIUM PERMANGANATE MAKE-UP TANK |
| 54 | TK-540-022 | X | SODIUM NITRITE MAKE-UP TANK |
| 55 | TK-540-025 | X | 15% CAUSTIC STORAGE TANK |
| 56 | TK-540-030 | X | DILUTE SODIUM HYDROXIDE MAKE-UP TANK |
| 57 | TK-540-032 | X | ACID WASTE SUMP TANK |
| 58 | TK-540-033 | X | CAUSTIC WASTE SUMP TANK |
| 59 | TP-580-001 | X | BAG UNLOADER LOCAL PANEL |
| 60 | AH-08A-704 | X | FRIT STORAGE/COLD CHEM BLDG SPLY AHU |
| 61 | MD-580-001 | X | BAG UNLOADER |
| 62 | MD-580-002 | X | SCREW CONVEYOR |
| 63 | MD-580-003 | X | BUCKET ELEVATOR |
| 64 | TK-580-001 | X | FRIT SLURRY MAKE-UP TANK |
| 71 | X | X | WEIGH SCALE |
| 72 | TP-580-002 | X | FRIT CONVEYING LOCAL PANEL |
| 78 | SU-540-001 | X | ACID WASTE SUMP |
| 80 | SU-540-002 | X | CAUSTIC WASTE SUMP |
| 81 | SU-580-001 | X | FRIT SLURRY MAKE-UP TANK SUMP |
| 82 | AN-530-001 | X | ACID WASTE HOLD TANK PH ANALYZER |
| 83 | AN-530-002 | X | ORGANIC WASTE NEUT TANK PH ANALYZER |
| 84 | AN-530-003 | X | CAUSTIC WASTE NEUT TANK PH ANALYZER |
| 85 | AH-08A-705 | X | ANALYTICAL LAB AHU |

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

BEST AVAILABLE COPY

REDUCED PRINT SCALE (FEET)
10 0 10 20

NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

| | | | |
|---|---|---|---|
| H-2-118124 | FRIT STORAGE/COLD CHEM BUILDING SECTIONS | | |
| H-2-118121 | FRIT STORAGE/COLD CHEM BUILDING MSC FLR PLANS | | |

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL REF CR VIT-90-0048 & ADDED EQUIP AH-08A-705 IN HVAC ROOM (100) | GVL RAC JCD EJ |
| C1 | 10/24/90 | IDENTIFIED STRUCTURAL BRACING & SHOWED WALL SYMBOLOGY | GVL RAC JCD EJ JLS FGS DPC RNG |
| C0 | 08/23/90 | RELEASED FOR DETAILED DESIGN | JCD RAC JCD EJ JLS FGS DPC RNG |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - ACO0-89RL10836

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FRIT STORAGE/COLD CHEM BUILDING
FLOOR PLAN

HANFORD WASTE VITRIFICATION PLANT

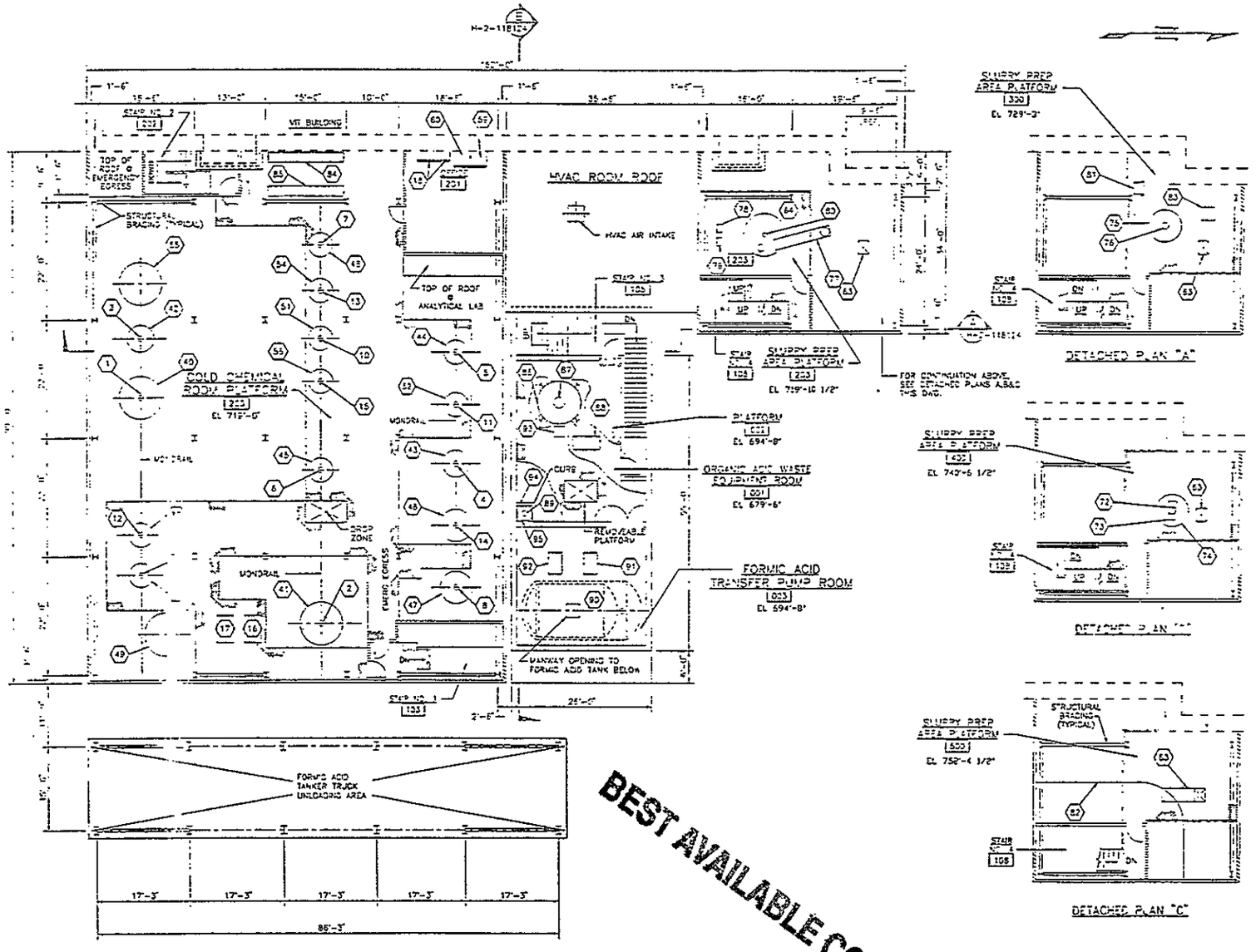
| | | | |
|---|---|---|---|
| DRAWN | N. GIBBONS | 10/26/90 | |
| CHECKED | P. CHEWLA | 10/27/90 | |
| ENGINEER | C. BROOKS | 10/26/90 | |
| PROJECT ENGINEER | L. SMITS | 10/26/90 | |
| PROJECT MANAGER | R. JACOBS | 10/26/90 | |
| SUPPORTING ENGINEERS | D. DUSS/RAYSLAS | 10/26/90 | |
| | J.C. DUSS | 10/26/90 | |
| | R. A. CELAYA | 10/26/90 | |
| | D. VAN LEYDNER | 10/26/90 | |

| | | |
|---|---|---|
| SCALE | 1/8"=1'-0" | |
| DRAWING NUMBER | H-2-118120 | REV 0 |
| SHEET | 1 OF 1 | |
| CONTRACT NUMBER | B-595 | 845724 |
| DRAWING NUMBER | 3105 | |
| SHEET NUMBER | 4 | |

NONE | NOT REQ'D | AUTOCAD

FILE: H2118120
DATE: 10-18-90
DWN GVL

9 1 1 7 1 1 2 1 1 6







| EQUIPMENT LIST | | | |
|---|---|---|---|
| ITEM NO. | EQUIPMENT NUMBER | HEIGHT FEET | DESCRIPTION |
| 1 | AG-530-001 | X | CAUSTIC WASTE HOLD TANK AGITATOR |
| 2 | AG-530-003 | X | ACID WASTE HOLD TANK AGITATOR |
| 3 | AG-530-005 | X | CAUSTIC WASTE NEUT TANK AGITATOR |
| 4 | AG-530-008 | X | ORGANIC ACID WASTE NEUT TANK AGITATOR |
| 5 | AG-540-001 | X | SUGAR SOLUTION MAKE-UP TANK AGITATOR |
| 6 | AG-540-002 | X | OFFGAS TREATMENT CHEM MKUP TANK AGITATOR |
| 7 | AG-540-004 | X | IRON/FRIT MODIFIER MAKE-UP TANK AGITATOR |
| 8 | AG-540-006 | X | FORMIC ACID SOLUTION TANK AGITATOR |
| 9 | AG-540-007 | X | NITRIC ACID DECON MAKE-UP TANK AGITATOR |
| 10 | AG-540-008 | X | DECON SOLUTION MAKE-UP TANK AGITATOR |
| 11 | AG-540-009 | X | OXALIC ACID DECON MAKE-UP TANK AGITATOR |
| 12 | AG-540-010 | X | POTASSIUM PERMANGANATE MKUP TANK AGITATOR |
| 13 | AG-540-011 | X | SODIUM NITRITE MAKE-UP TANK AGITATOR |
| 14 | AG-540-013 | X | DILUTE FORMIC ACID FEED TANK AGITATOR |
| 15 | AG-540-017 | X | DILUTE SODIUM HYDROXIDE MKUP TANK AGITATOR |
| 16 | BL-550-001A | X | ACID VENT BLOWER |
| 17 | BL-550-001B | X | ACID VENT BLOWER |
| 18 | DF-810-4224 | X | DRUM TERMINATION BOX FOS 4 |
| 40 | TK-530-001 | X | CAUSTIC WASTE HOLD TANK |
| 41 | TK-530-002 | X | ACID WASTE HOLD TANK |
| 42 | TK-530-005 | X | CAUSTIC WASTE NEUTRALIZATION TANK |
| 43 | TK-530-008 | X | ORGANIC ACID WASTE NEUTRALIZATION TANK |
| 44 | TK-540-001 | X | SUGAR SOLUTION MAKE-UP TANK |
| 45 | TK-540-002 | X | OFFGAS TREATMENT CHEMICAL MAKE-UP TANK |
| 46 | TK-540-005 | X | IRON/FRIT MODIFIER MAKE-UP TANK |
| 47 | TK-540-006 | X | FORMIC ACID SOLUTION TANK |
| 48 | TK-540-010 | X | DILUTE FORMIC ACID FEED TANK |
| 49 | TK-540-011 | X | 15% NITRIC ACID STORAGE TANK |
| 50 | TK-540-013 | X | NITRIC ACID DECON MAKE-UP TANK |
| 51 | TK-540-014 | X | DECON SOLUTION MAKE-UP TANK |
| 52 | TK-540-016 | X | OXALIC ACID DECON MAKE-UP TANK |
| 53 | TK-540-018 | X | POTASSIUM PERMANGANATE MAKE-UP TANK |
| 54 | TK-540-020 | X | SODIUM NITRITE MAKE-UP TANK |
| 55 | TK-540-021 | X | 50% CAUSTIC STORAGE TANK |
| 56 | TK-540-022 | X | DILUTE SODIUM HYDROXIDE MAKE-UP TANK |
| 59 | LP-540-004 | X | COLD CHEMICAL AREA LOCAL CONTROL PANEL |
| 60 | LP-530-001 | X | LIQUID WASTE AREA LOCAL CONTROL PANEL |
| 63 | HO-580-003 | X | BUCKET ELEVATOR |
| 64 | TK-580-001 | X | FRIT SLURRY MAKE-UP TANK |
| 72 | HO-580-004 | X | MAGNETIC CHUTE |
| 73 | HO-580-005 | X | LUMP BREAKER |
| 74 | HO-580-006 | X | SCALPING SCREEN |
| 75 | HO-580-007V | X | FRIT WEIGH BIN W/BIN ACTIVATOR |
| 76 | HO-580-008 | X | DIVERTER VALVE |
| 77 | HO-580-002 | X | SCREW CONVEYOR |
| 78 | PX-580-001 | X | FRIT SLURRY MAKE-UP TANK TRANSFER PUMP |
| 79 | PX-580-002 | X | FRIT SLURRY MAKE-UP TANK SAMPLE PUMP |
| 80 | AG-580-001 | X | FRIT SLURRY MAKE-UP TANK AGITATOR |
| 81 | FL-580-001 | X | VENT FILTER |
| 82 | MX-779-004 | X | FRIT SLURRY PREP AREA MONORAIL HOIST |
| 83 | SE-580-001V | X | DUST COLLECTOR W/BLOWER BAGHOUSE |
| 84 | MC-23A-302 | X | MOTOR CONTROL CENTER |
| 85 | MC-33B-302 | X | MOTOR CONTROL CENTER |
| 86 | TK-530-004 | X | ORGANIC ACID WASTE HOLD TANK |
| 87 | AG-530-004 | X | ORGANIC ACID WASTE HOLD TANK AGITATOR |
| 88 | PX-530-009 | X | ORGANIC ACID WASTE HOLD TANK TRANSFER PUMP |
| 89 | PX-530-007 | X | ORGANIC ACID WASTE HOLD TANK SUMP PUMP |
| 90 | [illegible]-540-007 | X | [illegible] ACID STORAGE TANK |
| 91 | [illegible]-540-034 | X | [illegible] ACID DILUTE TRANSFER PUMP |
| 92 | PX-540-007 | X | [illegible] ACID FEED TRANSFER PUMP |
| 93 | FG-530-001 | X | ORGANIC ACID WASTE HOLD TANK HEPA FILTER |
| 94 | SU-530-002 | X | ORGANIC ACID WASTE HOLD TANK SUMP |
| 95 | TK-530-007 | X | ORGANIC ACID WASTE HOLD TANK SUMP TANK |

RELEASED FOR PROJECT BASELINE CONTROL

REDUCED PRINT SCALE (FEET)
10 0 10 20

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | DRAWN | CHKD | ENGR | APPROVAL |
|---|---|---|---|---|---|---|
| C | 10/26/90 | ENLARGED OFFICE (RM/2021) SEE REF OF NO. HVAC-DAC & RELEASED FOR PROJECT BASELINE CONTROL | [illegible] | [illegible] | [illegible] | [illegible] |
| 01 | 9/24/90 | SHOWED WALL SYMBOLOGY IDENTIFIED BRACING 2ND SHOWED EXTENT OF CONCRETE PER DF-147 | GVL | RAC | JCD | EJ |
| | | | JLS | FGB | OPC | RNG |
| 00 | 8/9/90 | RELEASED FOR DETAILED DESIGN | GVL | RTT | JCD | EJ |
| | | | JLS | FGB | OPC | RNG |

ENGINEERING RELEASE
REV ____ DATE ____
EPD ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-89RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FRIT STORAGE/COLD CHEM BUILDING
MISCELLANEOUS FLOOR PLANS

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| F. K. GIBBONS | 8/23/90 | |
| P. CHAINLA | 8/23/90 | |
| F. C. BROOKS | 8/27/90 | |
| L. J. SMETS | 8/17/90 | |
| E. R. JACOBS | 8/17/90 | |
| J.C.G./SS/P.VSLAS | 8/15/90 | |
| C.T. VAN LEYDNER | 8/14/90 | |
| T. TANAMOTO | 8/14/90 | B-595 · 845724 · 3105 |
| C. VAN LEYDNER | 8/14/90 | 1/8"=1'-0" · 4 |

| | | | |
|---|---|---|---|
| NONE | NOT REQD | H-2-118121 | 1 1 1 0 |

AUTOCAD

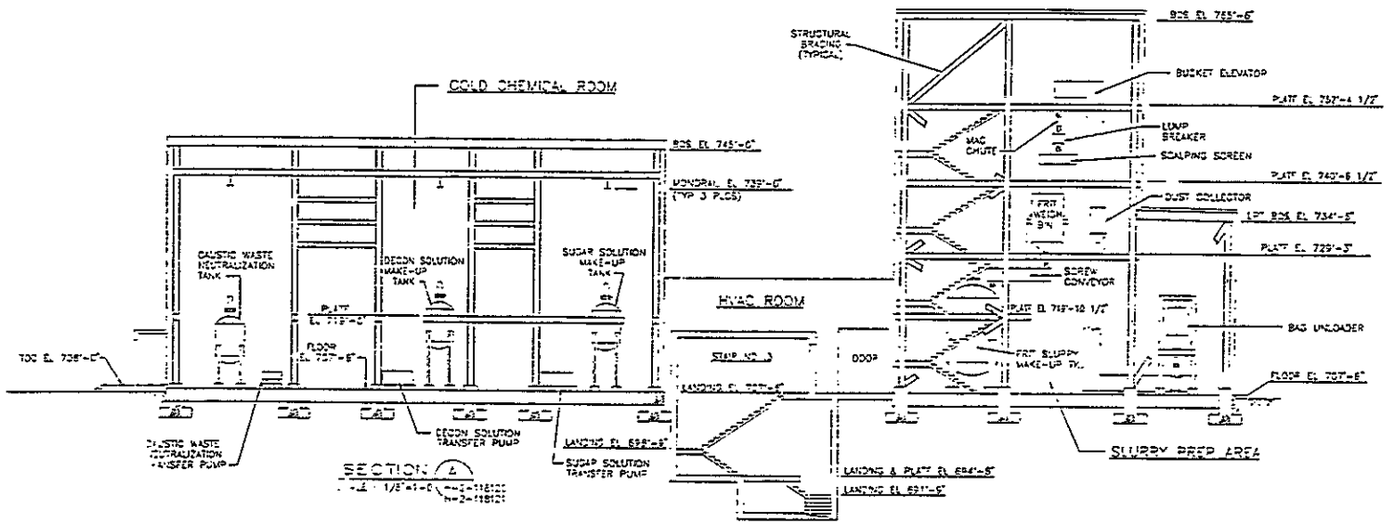
FILE: H2118121
10-15-90

H-2-118124 FRIT STORAGE/COLD CHEM BUILDING SECTIONS
H-2-118120 FRIT STORAGE/COLD CHEM BUILDING FLOOR PLAN

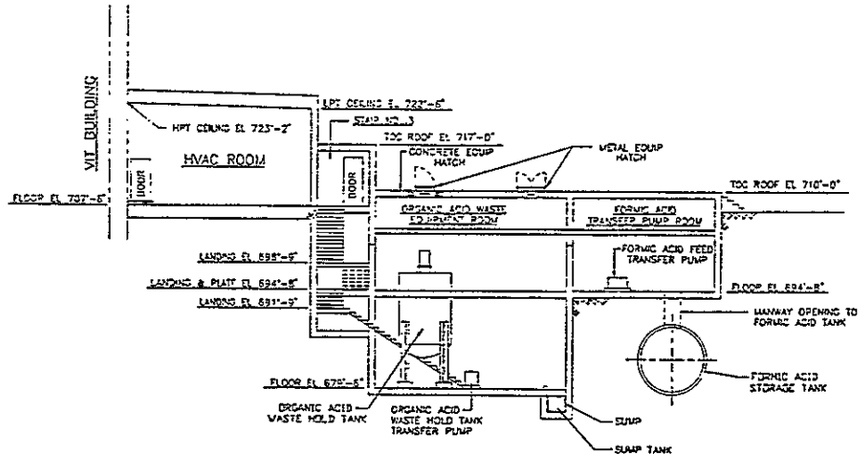
NOTE:
1. FOR NOTES SEE DRAWING H-2-118120

BEST AVAILABLE COPY

9 1 1 2 1 1 1 / 1 1 / 1 7




SECTION A
SCALE : 1/8"=1'-0" H-2-118120 H-2-118121




SECTION B
SCALE : 1/8"=1'-0" H-2-118120 H-2-118121

NOTE:
1. FOR NOTES SEE DRAWING H-2-118120.

H-2-118121 FRIT STORAGE/COLD CHEM BUILDING MISC FLOOR PLANS
H-2-118120 FRIT STORAGE/COLD CHEM BUILDING FLOOR PLAN

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

REDUCED PRINT SCALE (FEET)
10 0 10 20

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| C | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CR NO. [illegible] & ADDED STRUCTURAL BRACE IN SLURRY PREP AREA | GVL FRAC JCD EJ |
| B | 9/5/90 | IDENTIFIED STRUCTURAL BRACING PER CR 441 | GVL FRAC JCD EJ / JLS FGB DPC RNG |
| A | 8/3/90 | RELEASED FOR DETAILED DESIGN | GVL FRAC JCD EJ / JLS FGB DPC RNG |

ENGINEERING RELEASE
REV ____ DATE ____
EPD

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10836

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
FRIT STORAGE/COLD CHEM BUILDING
SECTIONS

HANFORD WASTE VITRIFICATION PLANT

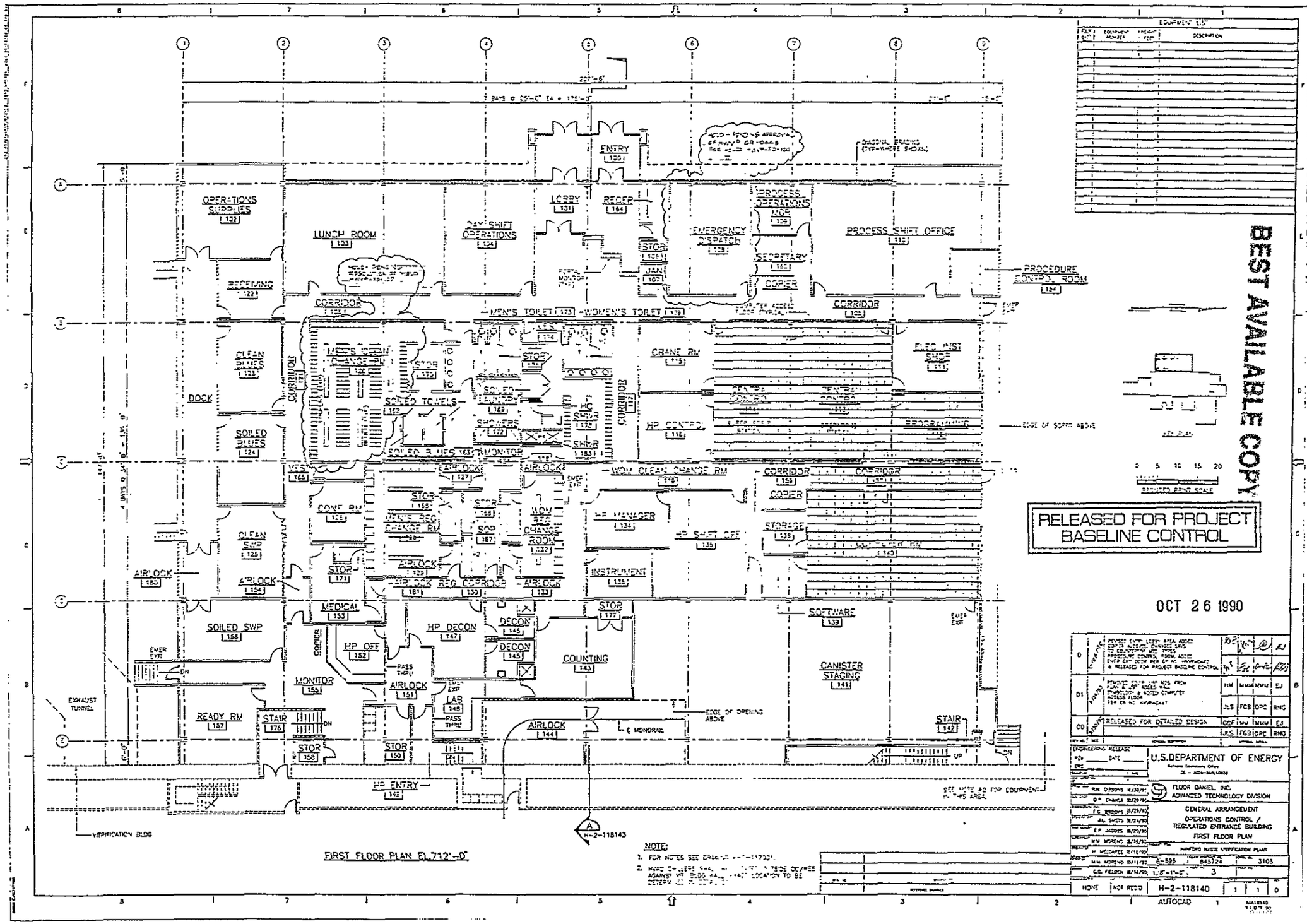
| | | | |
|---|---|---|---|
| DRAWN BY | T. GIBBONS 6/26/90 | PROJECT | B-595 |
| DESIGNED BY | P. CHAWLA 8/27/90 | FOR PROJECT | 845724 |
| ENGINEERED BY | T. BROOKS 8/27/90 | | 3105 |
| PROJECT ENGINEER | J. SMETS 8/27/90 | SCALE | 1/8"=1'-0" |
| CHECKED BY | J. JACOBS 8/27/90 | SHEET NO. | 4 |
| APPROVED BY | J. SIMS / R. RYSLAS 8/27/90 | | |
| CHIEF ENGINEER | T. VAN LEYDEN 8/27/90 | | |
| CONSTRUCTION | T. TANAMOTO 8/27/90 | | |
| CONSTRUCTION MANAGER | T. VAN LEYDEN 8/27/90 | | |

NONE | NOT REQ'D | H-2-118124 | 1 | 1 | 0

AUTOCAD

FILE: H2118124
10-18-90

8 1 1 7 0 1 2 1 1 6


OPERATIONS SUPPLIES 132
LUNCH ROOM 133
DAY SHIFT OPERATIONS 134
LOBBY 131
RECEP 164
ENTRY 130
EMERGENCY DISPATCH 128
PROCESS OPERATIONS MGR 129
SECRETARY 163
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PROCEDURE CONTROL ROOM 154
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MEN'S TOILET 173
WOMEN'S TOILET 179
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DOCK
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SHWR 183
MONITOR 178
CRANE RM 115
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AIRLOCK 127
WOM CLEAN CHANGE RM 182
CORRIDOR 159
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CONF RM 125
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HP MANAGER 134
HP SHIFT OFF 135
STORAGE 139
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AIRLOCK 180
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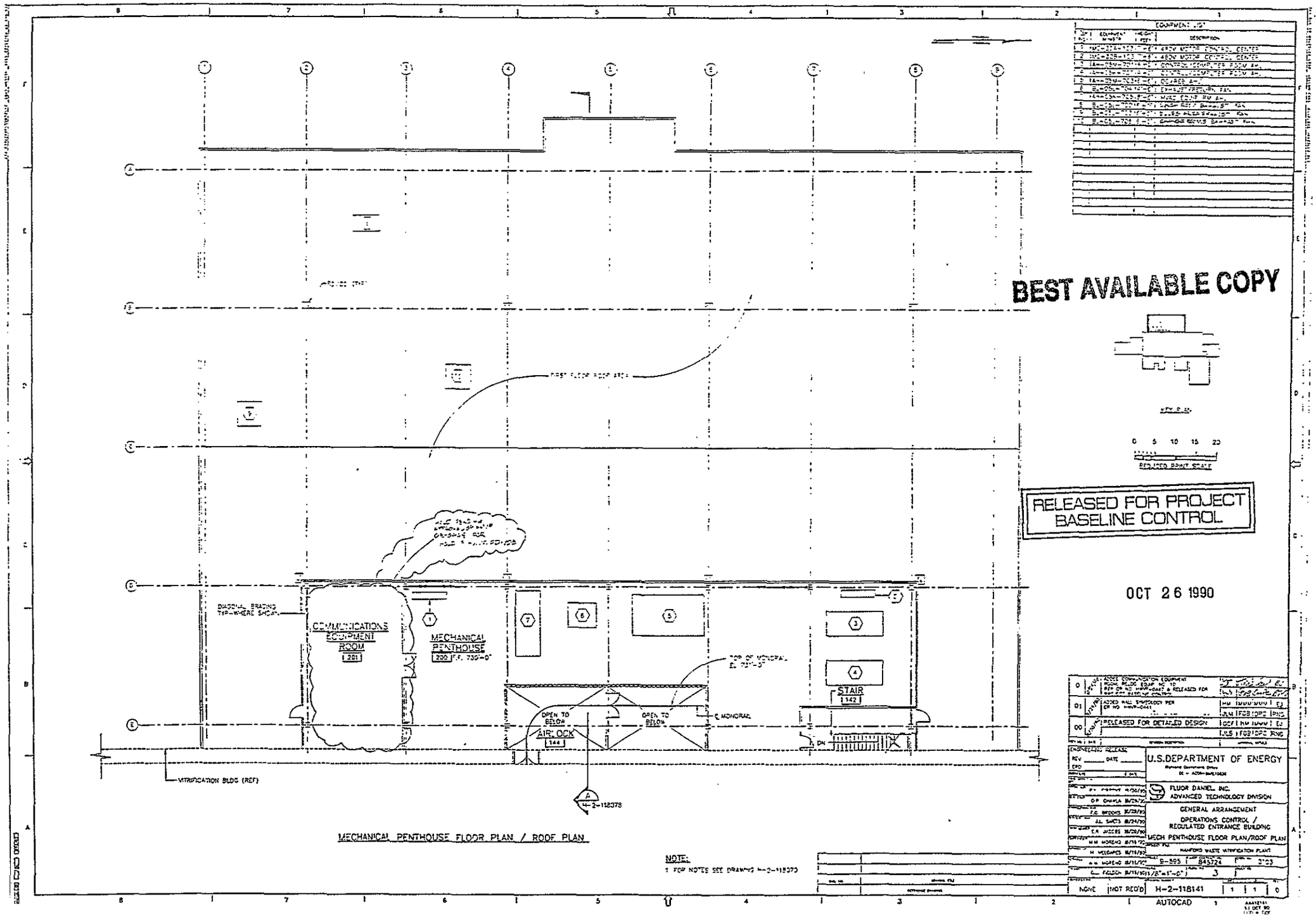
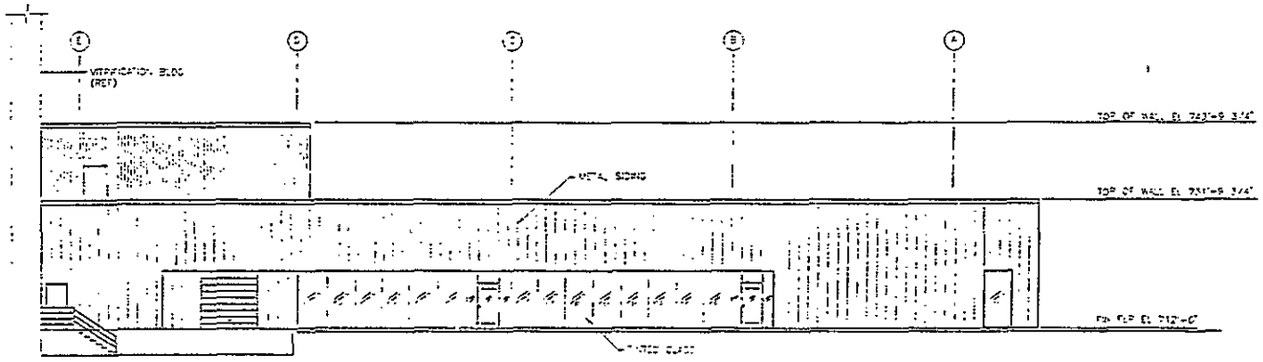
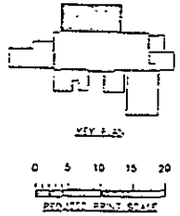
AIRLOCK REG CORRIDOR 161
AIRLOCK 133
INSTRUMENT 135
MEDICAL 153
HP DECON 147
DECON 145
COUNTING 143
SOFTWARE 139
SOILED SWP 156
HP OFF 152
CANISTER STAGING 141
MONITOR 155
AIRLOCK 151
LAB 148
EXHAUST TUNNEL
READY RM 157
STAIR 176
STAIR 142
AIRLOCK 144
EDGE OF OPENING ABOVE
HP ENTRY 143
VITRIFICATION BLDG
H-2-118143
FIRST FLOOR PLAN EL.712'-0"
NOTE:
1. FOR NOTES SEE DRAWING
2. HVAC
AGAINST
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
BEST AVAILABLE COPY
U.S.DEPARTMENT OF ENERGY
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
OPERATIONS CONTROL / REGULATED ENTRANCE BUILDING
FIRST FLOOR PLAN
HANFORD WASTE VITRIFICATION PLANT
RELEASED FOR DETAILED DESIGN
H-2-118140
AUTOCAD

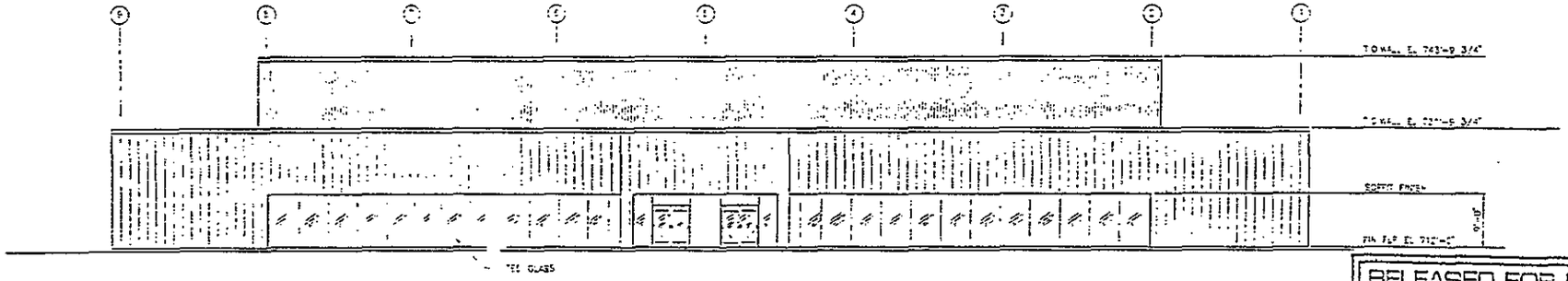

BEST AVAILABLE COPY
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
COMMUNICATIONS EQUIPMENT ROOM 201
MECHANICAL PENTHOUSE 200 F.F. 730'-0"
OPEN TO BELOW
AIR LOCK 144
STAIR 142
VITRIFICATION BLDG (REF)
MECHANICAL PENTHOUSE FLOOR PLAN / ROOF PLAN
NOTE:
1 FOR NOTES SEE DRAWING H-2-118079
U.S. DEPARTMENT OF ENERGY
FLUOR DANIEL INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
OPERATIONS CONTROL / REGULATED ENTRANCE BUILDING
MECH PENTHOUSE FLOOR PLAN/ROOF PLAN
HANFORD WASTE VITRIFICATION PLANT
H-2-118141
AUTOCAD




NORTH ELEVATION



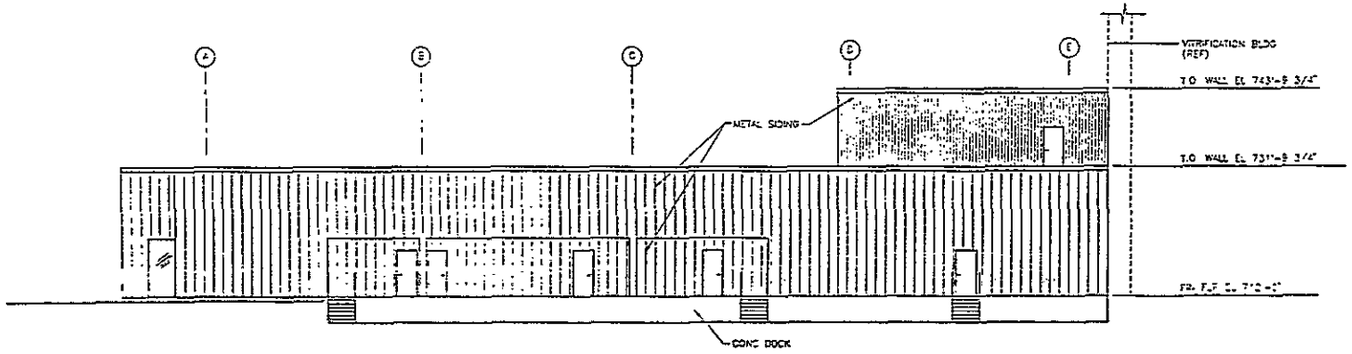

BEST AVAILABLE COPY




WEST ELEVATION

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990




SOUTH ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-118140.

| | | |
|---|---|---|
| 0 | REVISED ENTRY AREA PER CR NO. H-WSF-0442 & RELEASED FOR PROJECT BASELINE CONTROL | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____
IRO

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
EF - Richland, Washington

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
OPERATIONS CONTROL / REGULATED ENTRANCE BUILDING
EXTERIOR ELEVATIONS

HANFORD WASTE VITRIFICATION PLANT

R.M. GIBBONS 8/30/90
G.P. CHAMA 8/29/90
F.G. BROOKS 8/29/90
J.L. SWETS 8/29/90
E.F. JACOBS 8/29/90
M.M. MORENO 8/16/90
H. MELGARES 8/16/90
R.M. MORENO 8/16/90
G.C. FELDER 8/16/90

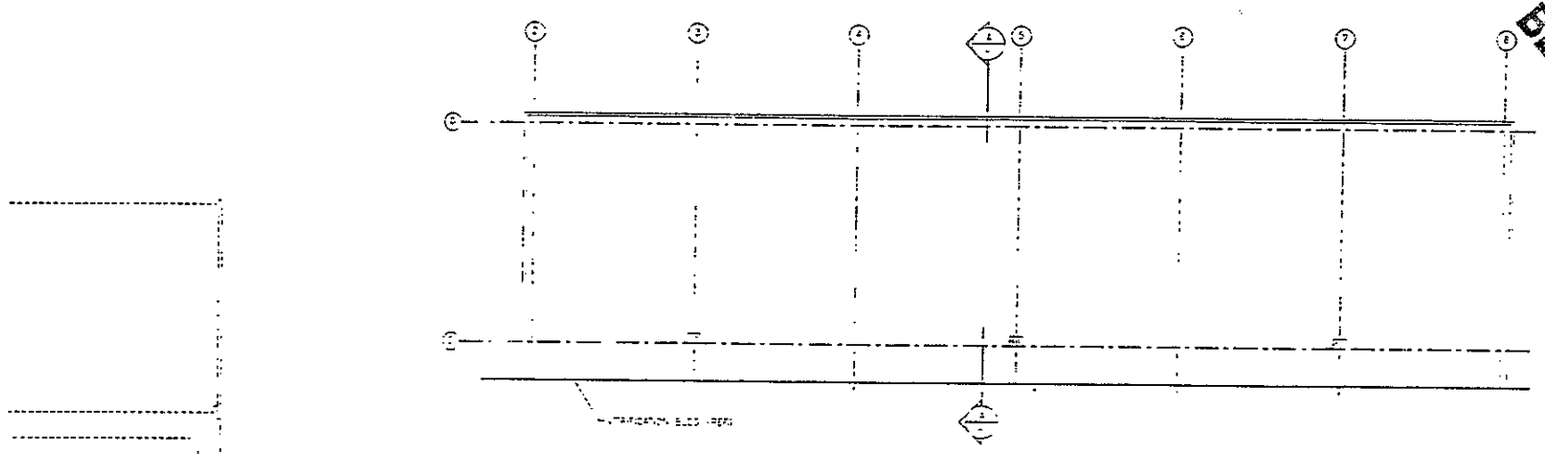
B-595 | 845724 | 3103
1/8"=1'-0" | 3

NONE | NOT REQ'D | H-2-118142 | 1 | 1 | 0

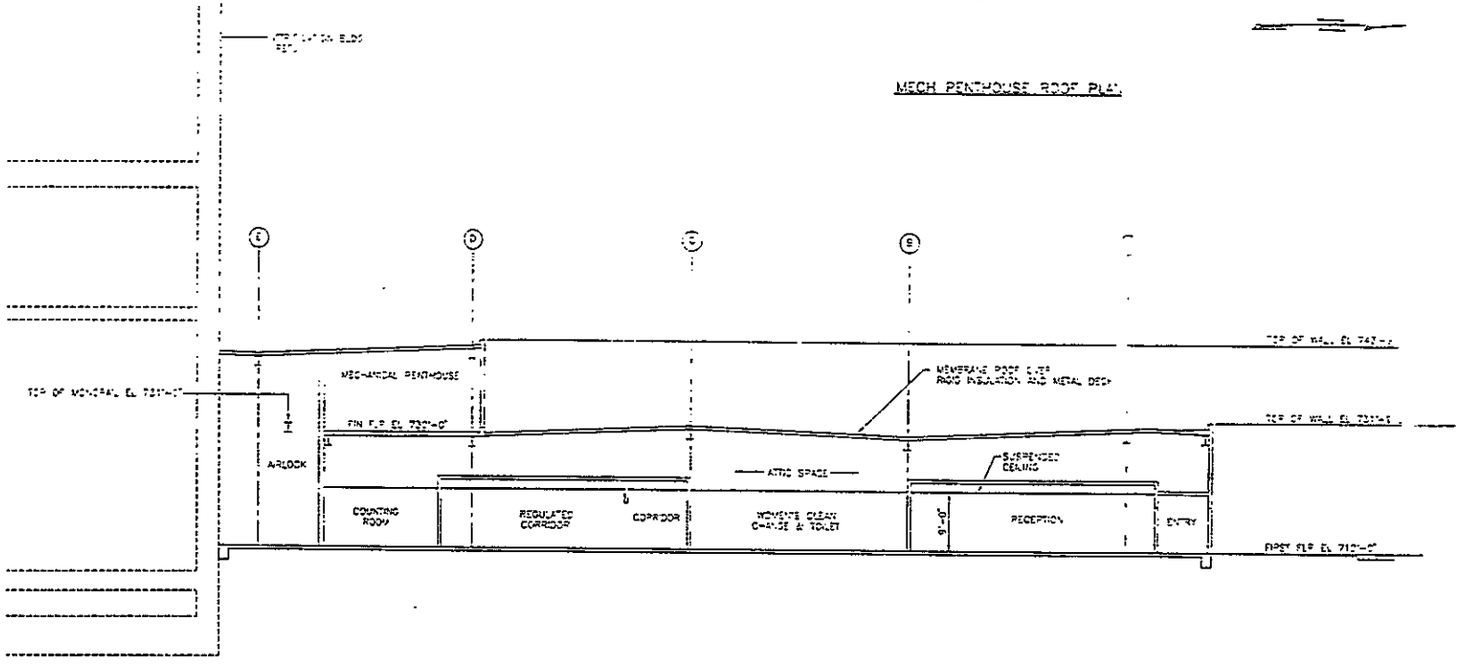
AUTOCAD

AAA18142
01-OCT-90

BEST AVAILABLE COPY



MECH PENTHOUSE ROOF PLAN




SECTION A

NOTE:
1. FOR NOTES SEE DRAWING

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | | |
|---|---|---|
| D | 10/26/90 | RELEASED FOR PROJECT BASELINE CONTROL PER CP NO |
| CC | 10/26/90 | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
OPERATIONS CONTROL/
REGULATED ENTRANCE BUILDING
PENTHOUSE ROOF PLAN/BLDG SECTION

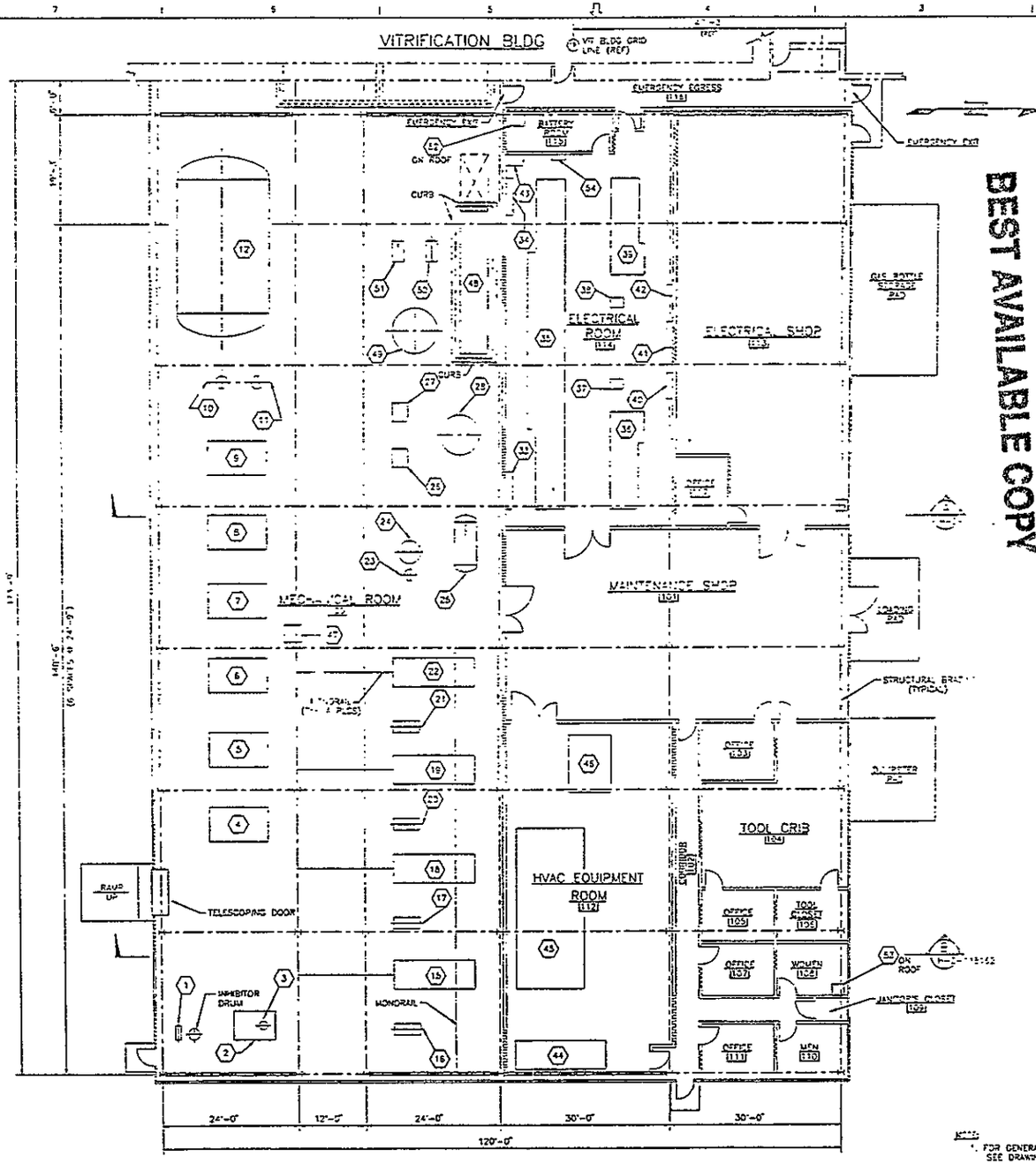
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-118143 | 0 |

AUTOCAD

A4418143
18 OCT 90

9 1 1 2 1 1 1 2 1 6




BEST AVAILABLE COPY

EQUIPMENT LIST

| ITEM NO. | EQUIPMENT NUMBER | HEIGHT (FEET) | DESCRIPTION |
|---|---|---|---|
| 1 | PX-442-002 | X | INHIBITOR ADDITION PUMP |
| 2 | SSU-530-001 | X | MECH/ELEC SERVICES BLDG SUMP |
| 3 | PX-530-012 | X | MECH/ELEC SERVICES BLDG SUMP PUMP |
| 4 | CY-410-001A | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 5 | CY-410-001B | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 6 | CY-410-001C | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 7 | CY-410-001D | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 8 | CY-410-001E | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 9 | CY-410-001F | 6'-4" | INSTR/PLANT AIR COMPRESSOR |
| 10 | FL-410-001B | X | PLANT AIR FILTER |
| 11 | FL-410-001A | X | PLANT AIR FILTER |
| 12 | VX-410-002 | X | PLANT AIR RECEIVER |
| 15 | CM-034-701 | X | CENTRAL CHILLED WATER SYSTEM CHILLER |
| 16 | PX-034-701 | X | CENTRAL CHILLED WATER PUMP |
| 17 | PX-034-702 | X | CENTRAL CHILLED WATER PUMP |
| 18 | CM-034-702 | X | CENTRAL CHILLED WATER SYSTEM CHILLER |
| 19 | CM-034-703 | X | CENTRAL CHILLED WATER SYSTEM CHILLER |
| 20 | PX-034-703 | X | CENTRAL CHILLED WATER PUMP |
| 21 | PX-034-704 | X | CENTRAL CHILLED WATER PUMP |
| 22 | CM-034-704 | X | CENTRAL CHILLED WATER SYSTEM CHILLER |
| 23 | TK-034-703 | X | CENTRAL CHW CHEMICAL INJ TANK |
| 24 | TK-034-702 | X | CENTRAL CHW AIR SEPARATOR |
| 25 | TK-034-701 | X | CENTRAL CHW EXPANSION TANK |
| 26 | DR-410-001A | 6'-6" | INSTRUMENT AIR DRYER |
| 27 | DR-410-001B | 6'-6" | INSTRUMENT AIR DRYER |
| 28 | VX-410-001 | X | INSTRUMENT AIR RECEIVER |
| 32 | MC-324-351 | 7'-6" | MOTOR CONTROL CENTER (THIS BLDG) |
| 34 | MC-325-351 | 7'-6" | MOTOR CONTROL CENTER (THIS BLDG) |
| 35 | LC-324-351 | 8'-6" | NORMAL LOAD CENTER (SERVICE BLDGS) |
| 36 | LC-325-551 | 7'-6" | STANDBY LOAD CENTER (SERVICE BLDGS) |
| 37 | MC-338-551 | 7'-6" | MOTOR CONTROL CENTER (THIS BLDG) |
| 38 | MC-334-551 | 7'-6" | MOTOR CONTROL CENTER (THIS BLDG) |
| 39 | LC-334-551 | 7'-6" | STANDBY LOAD CENTER (SERVICE BLDGS) |
| 40 | X | X | 120-VAC & POWER PANEL |
| 41 | X | X | 110-VDC & POWER PANEL |
| 42 | X | X | 125 VDC PANEL |
| 43 | X | X | BATTERY CHARGER |
| 44 | AH-055-701 | X | MECH/ELEC BLDG OFFICE SUPPLY AHU |
| 45 | AH-055-702 | X | MECH/ELEC EQUIP RM SUPPLY AHU |
| 46 | B-055-702 | X | MECH/ELEC BLDG EQUIP RM RET EXH FAN |
| 47 | CP-410-001 | 7'-0" | AIR COMPRESSOR SEQUENCE CONTROL PANEL |
| 48 | TW-430-001 | X | REVERSE OSMOSIS UNIT |
| 49 | TK-430-001 | X | DEMINERALIZED WATER STORAGE TANK |
| 50 | PX-430-002A | X | DEMINERALIZED WATER MAKE-UP PUMP |
| 51 | PX-430-002B | X | DEMINERALIZED WATER MAKE-UP PUMP |
| 52 | B-055-703 | 7'-0" | MECH/ELEC BLDG STPT RM PROC EXH FAN |
| 53 | B-055-701 | 7'-0" | MECH/ELEC BUILDING MENS/WOMENS ON ROOF EXHAUST FAN |
| 54 | AH-055-703 | 7'-6" | MECH/ELEC BLDG BTPT RM SPLY AHU |

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

REDUCED PRINT SCALE (FEET)

10 0 10 20

| | | | | | |
|---|---|---|---|---|---|
| C | 10/26/90 | MEDIATE BATTERY ROOM ROOF EXHAUST FAN, REMOVE AND TELESCOPING DOOR, AIR COMPRESSOR SEQUENCING CONTROL PANEL, INSTR/PLANT AIR COMPRESSORS AND STRUCTURAL BRACING. REFER CR NO. HNF-CR-0445. REFER CR BOTTLE RAC & RELEASED FOR PROJECT BASELINE CONTROL | RAC | GVL | JCD EJ |
| 01 | 7/24/90 | 100% PRE-CONCEPTUAL ENGINEERING & DESIGN. ELEVATION EXT AT ROOM THE SHOWED. REFER CR 441 | RAC | GVL | JCD EJ |
| | | | JLS | FGS | OPC RNG |
| 00 | 6/14/90 | RELEASED FOR DETAILED DESIGN | RAC | RTT | JCD EJ |
| | | | JLS | FGS | OPC RNG |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-77RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
MECH/ELEC SERVICES BUILDING
FLOOR PLAN

HANFORD WASTE VITRIFICATION PLANT

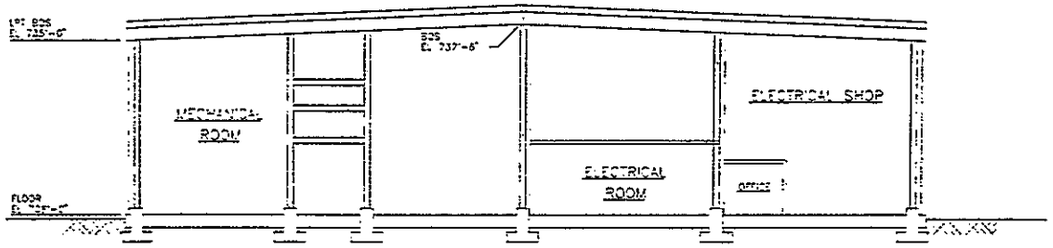
| | | | | |
|---|---|---|---|---|
| P.A. CELAYA | 9/13/90 | | | |
| R.T. TANIMOTO | 9/13/90 | B-595 | 845724 | 3105 |
| D.E. LOESSNER | 9/13/90 | 1/8"=1'-0" | 13 | |

NONE | NOT REQ'D | H-2-118160 | 1 | 1 | 0

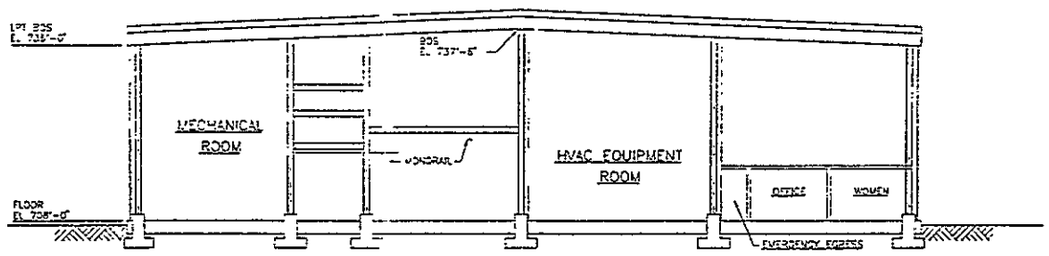
AUTOCAD 1

NOTES:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

3 1 1 7 1 1 2 1 1 6




SECTION A
SCALE 1/8"=1'-0" H-2-118160




SECTION B
SCALE : 1/8"=1'-0" H-2-118160

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

REDUCED PRINT SCALE (FEET)
10 0 10 20

NOTE:
1. FOR NOTES SEE DRAWING H-2-118160

| REV | DESCRIPTION |
|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL, REF CR NO HNYP-0442 |
| 00 | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____
ENG ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

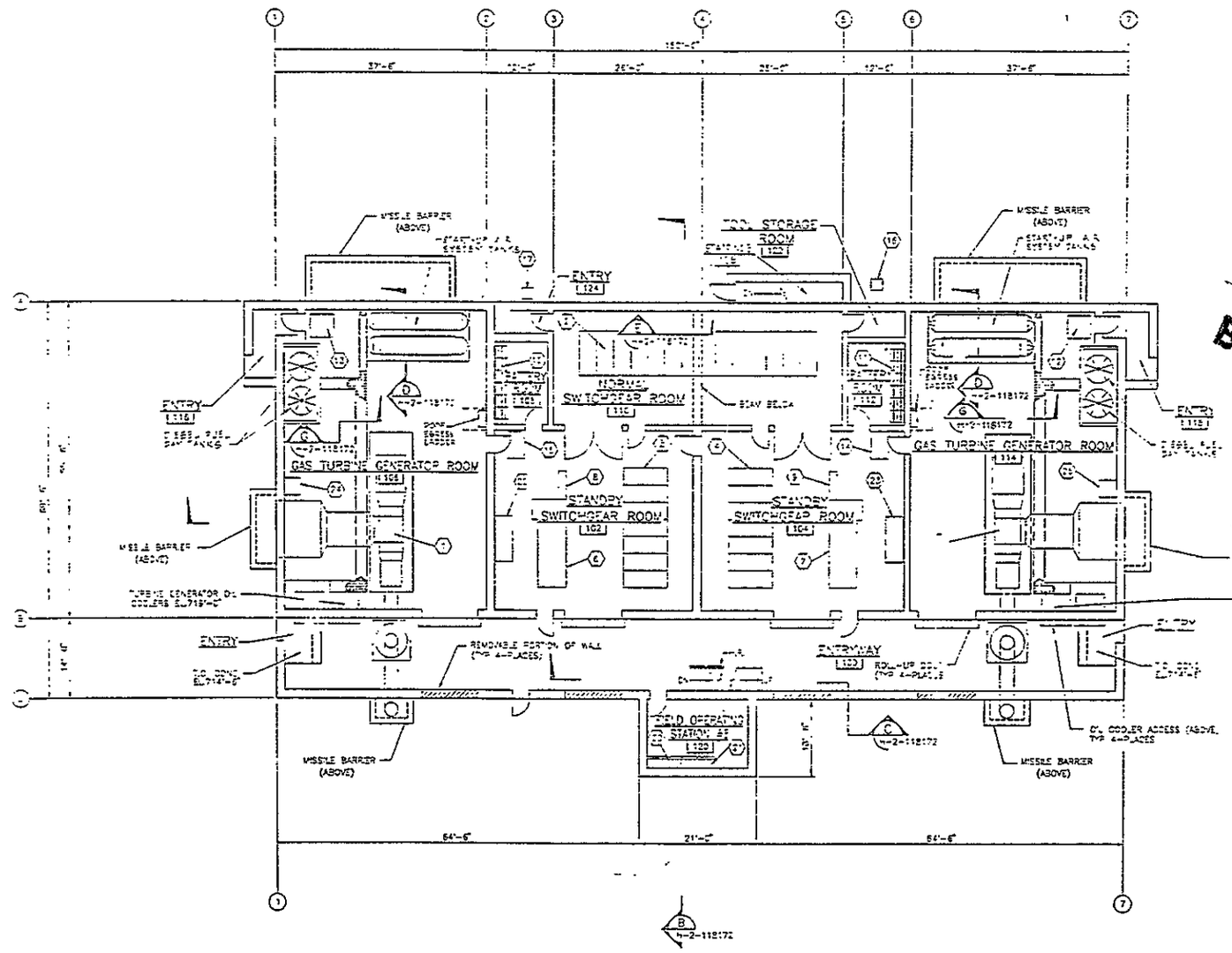
FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
MECH/ELEC SERVICES BUILDING
SECTIONS A & B

HANFORD WASTE VITRIFICATION PLANT

| | |
|---|---|
| R.N. GREENE | 8/14/90 |
| P. CHAWLA | 8/14/90 |
| F.J. BROWN | 8/14/90 |
| J.L. SMETS | 8/14/90 |
| E.R. JACOBS | 8/13/90 |
| V.C.D.JES/R.YSUA | 8/13/90 |
| R.A. CELAYA | 8/13/90 |
| R.T. TANIMOTO | 8/13/90 |
| D.P. LOSSNER | 8/13/90 |

9-895 845724
13
1/8"=1'-0"
NOTE NOT PRINT H-2-118162
AUTOCAD
FILE H2118162
DATE 10-12-90




FIRST FLOOR PLAN EL.705'-0"
UNLESS NOTED OTHERWISE

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

| EQUIPMENT LIST | | | |
|---|---|---|---|
| QTY | EQUIPMENT NUMBER | | DESCRIPTION |
| 1 | [illegible] | [illegible] | TURBINE GENERATOR |
| 2 | [illegible] | [illegible] | 13 KV SWGR (NORMAL) |
| 3 | [illegible] | [illegible] | 13 KV SWGR (STANDBY) |
| 4 | [illegible] | [illegible] | 13 KV SWGR (STANDBY) |
| 5 | [illegible] | [illegible] | 13 KV GENERATOR |
| 6 | [illegible] | [illegible] | 480V LOAD CENTER (STANDBY) |
| 7 | [illegible] | [illegible] | 480V LOAD CENTER (STANDBY) |
| 8 | [illegible] | [illegible] | 480V MCC CONTROL CENTER (STANDBY) |
| 9 | [illegible] | [illegible] | 480V MCC CONTROL CENTER (STANDBY) |
| 10 | [illegible] | [illegible] | STATION BATTERY |
| 11 | [illegible] | [illegible] | STATION BATTERY |
| 12 | [illegible] | [illegible] | BATTERY ROOM EXHAUST FAN |
| 13 | [illegible] | [illegible] | BATTERY ROOM EXHAUST FAN |
| 14 | [illegible] | [illegible] | BATTERY ROOM NORMAL AIR |
| 15 | [illegible] | [illegible] | BATTERY ROOM NORMAL AIR |
| 16 | [illegible] | [illegible] | AIR COOLED COND UNIT |
| 17 | [illegible] | [illegible] | AIR COOLED COND UNIT |
| 2 | [illegible] | [illegible] | DEFRIGERATED PROCESSING UNIT (TYP 2) |
| 2 | [illegible] | [illegible] | DEFRIGERATED PROCESSING UNIT (TYP 2) |
| 1 | [illegible] | - | OPERATION CONTROL PANEL # 1 |
| 1 | [illegible] | - | OPERATION CONTROL PANEL # 2 |
| 1 | [illegible] | [illegible] | ELECTRIC UNIT HEATER |
| 1 | [illegible] | [illegible] | ELECTRIC UNIT HEATER |

RELEASED FOR DETAILED DESIGN

ENGINEERING RELEASE
BY: _____ DATE: _____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
Richland, Washington

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SWITCHGEAR BUILDING
FIRST FLOOR PLAN

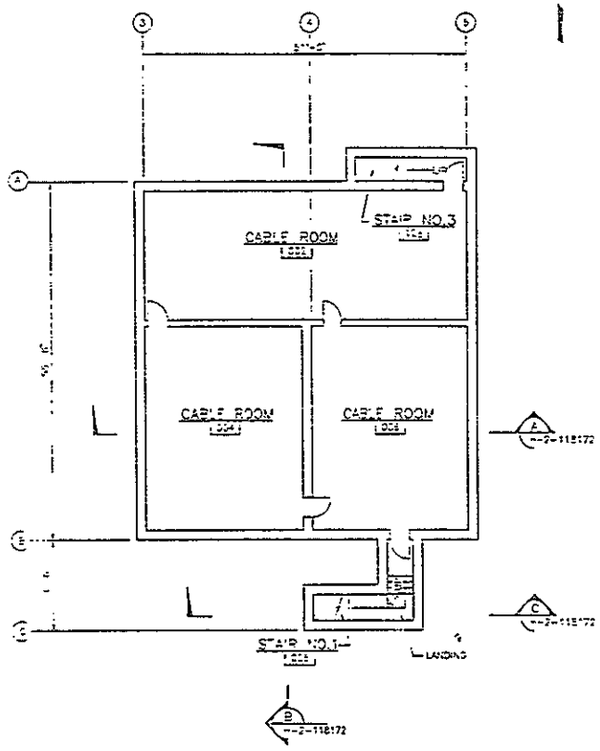
HANFORD WASTE VITRIFICATION PLANT

E-595 | 845724 | 3107
1/8"=1'-0" | 8

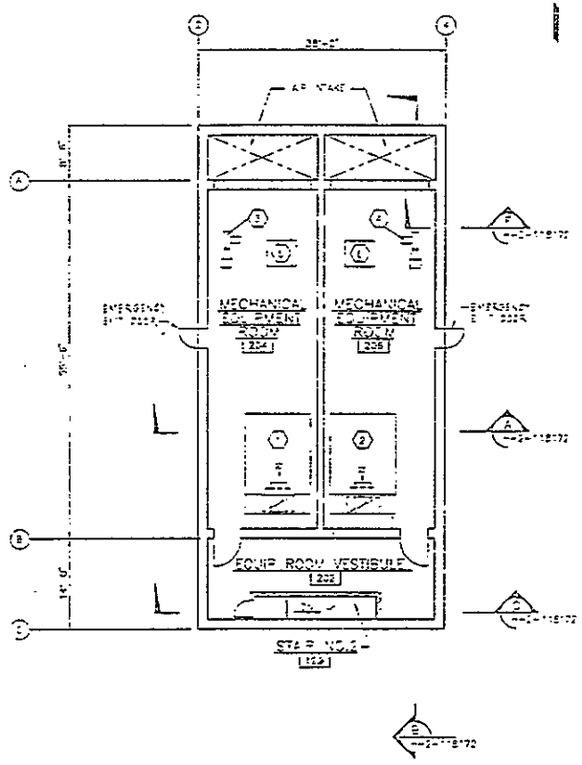
NONE | NOT REQ'D | H-2-118170 | 0

AUTOCAD 1 ED118170 13 AUG 90 LCO = VYC

9112171215




BASEMENT PLAN @ EL.693'-6"




SECOND FLOOR PLAN @ EL.726'-0"

EQUIPMENT LIST

| QTY | EQUIPMENT NUMBER | HOOKUP | DESCRIPTION |
|---|---|---|---|
| 2 | AHU-253-711 | 1.5-HP | 1 NORM. SWITCHGEAR ROOM AHU |
| 2 | AHU-253-712 | 1.5-HP | 1 NORM. SWITCHGEAR ROOM AHU |
| 3 | B.-OSF-713 | 1.5-HP | 1 SWITCHGEAR ROOM EMERGENCY FAN |
| 4 | B.-OSF-714 | 1.5-HP | 1 SWITCHGEAR ROOM EMERGENCY FAN |
| 5 | B.-OSF-717 | 1.5-HP | 1 GENERATOR ROOM EMERGENCY FAN |
| 6 | B.-OSF-718 | 1.5-HP | 1 GENERATOR ROOM EMERGENCY FAN |

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RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118170.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 0 | 7/23/90 | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL01830

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

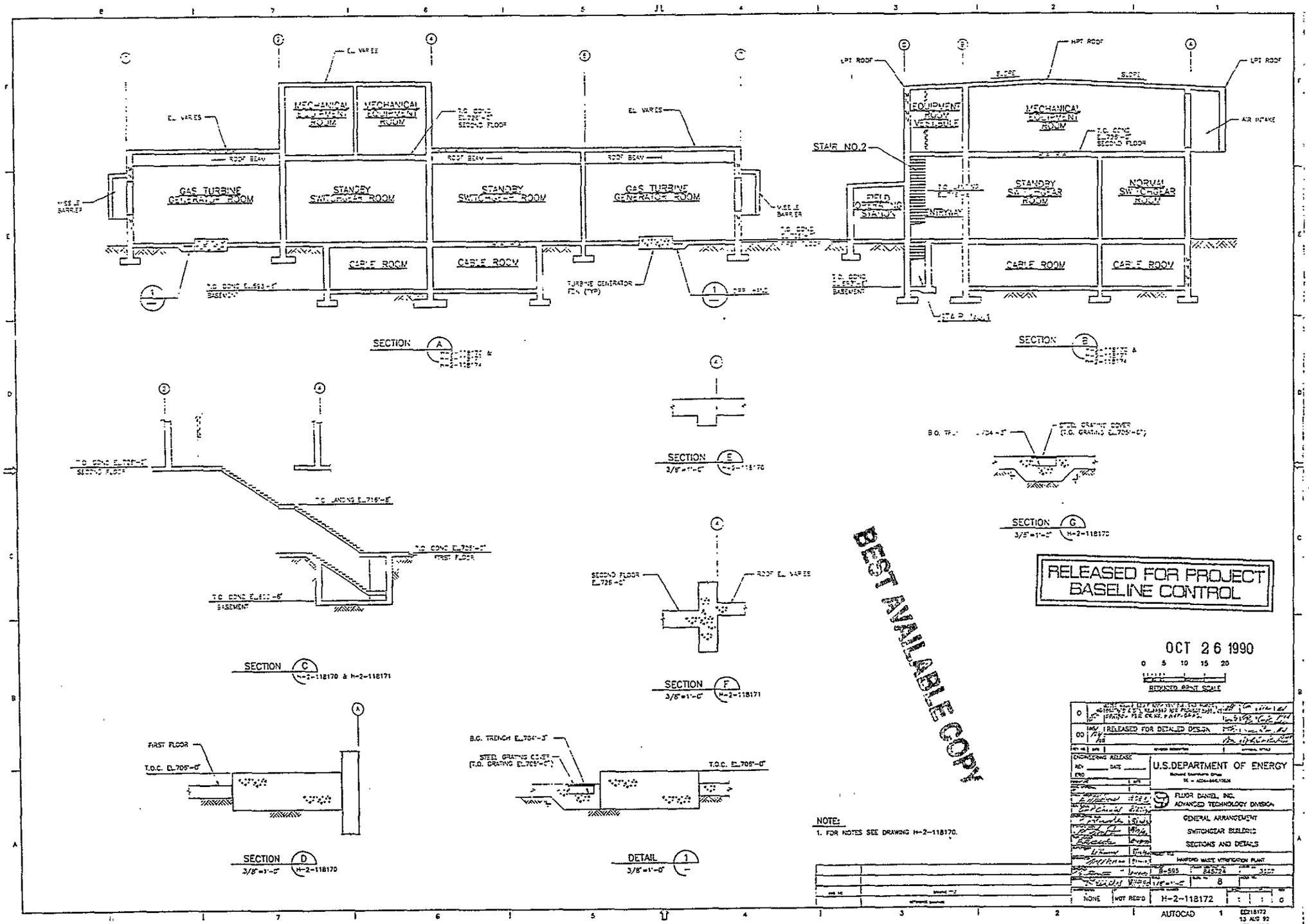
GENERAL ARRANGEMENT
SWITCHGEAR BUILDING
BASEMENT & SECOND FLOOR PLAN

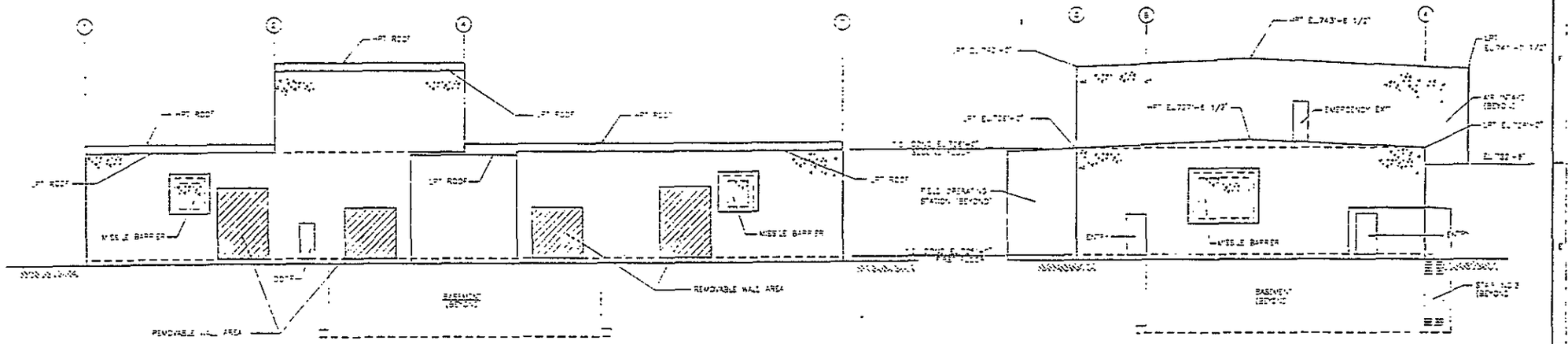
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 6-595 | 845724 | | |
| 1/8"=1'-0" | 8 | | |
| NONE | NOT REQ'D | H-2-118171 | 0 |

AUTOCAD 1 DC218171 23 AUG 90

9 1 1 2 1 1 2 1 6


MECHANICAL EQUIPMENT ROOM
GAS TURBINE GENERATOR ROOM
STANDBY SWITCHGEAR ROOM
CABLE ROOM
EQUIPMENT ROOM VESTIBULE
STAIR NO.2
FIELD OPERATING STATION
NORMAL SWITCHGEAR ROOM
SECTION A
SECTION B
SECTION C
SECTION D
SECTION E
SECTION F
SECTION G
DETAIL 1
RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990
BEST AVAILABLE COPY
NOTE:
1. FOR NOTES SEE DRAWING H-2-118170.
U.S.DEPARTMENT OF ENERGY
FLUOR DANIEL, INC. ADVANCED TECHNOLOGY DIVISION
GENERAL ARRANGEMENT
SWITCHGEAR BUILDING
SECTIONS AND DETAILS
HANFORD WASTE VITRIFICATION PLANT
RELEASED FOR DETAILED DESIGN
H-2-118172

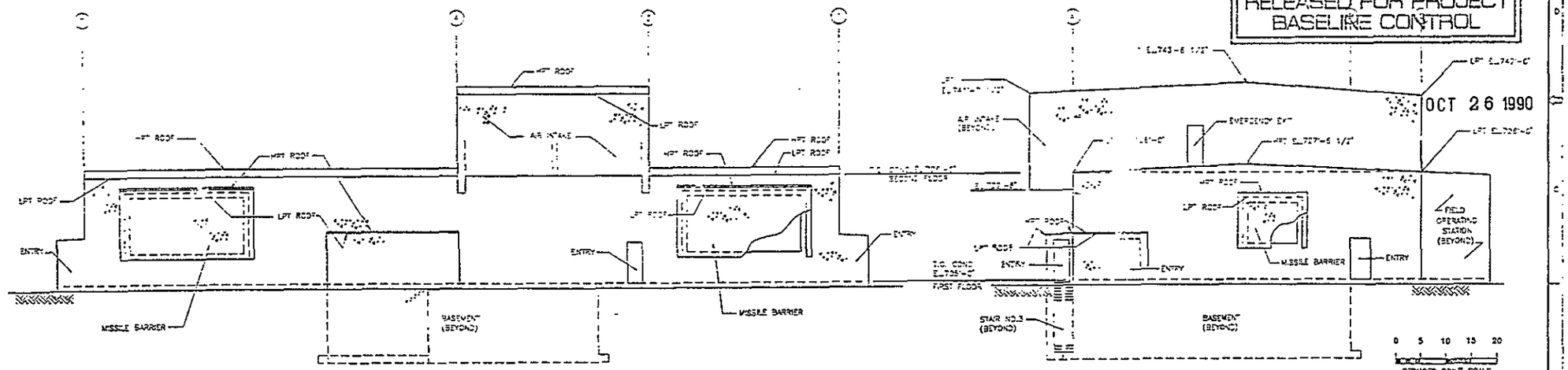



SOUTH ELEVATION

EAST ELEVATION

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL
OCT 26 1990




NORTH ELEVATION

WEST ELEVATION

NOTE:
1. FOR NOTES SEE DRAWING H-2-112770.

| | | |
|---|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL | |
| 00 | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SWITCHGEAR BUILDING
ELEVATIONS

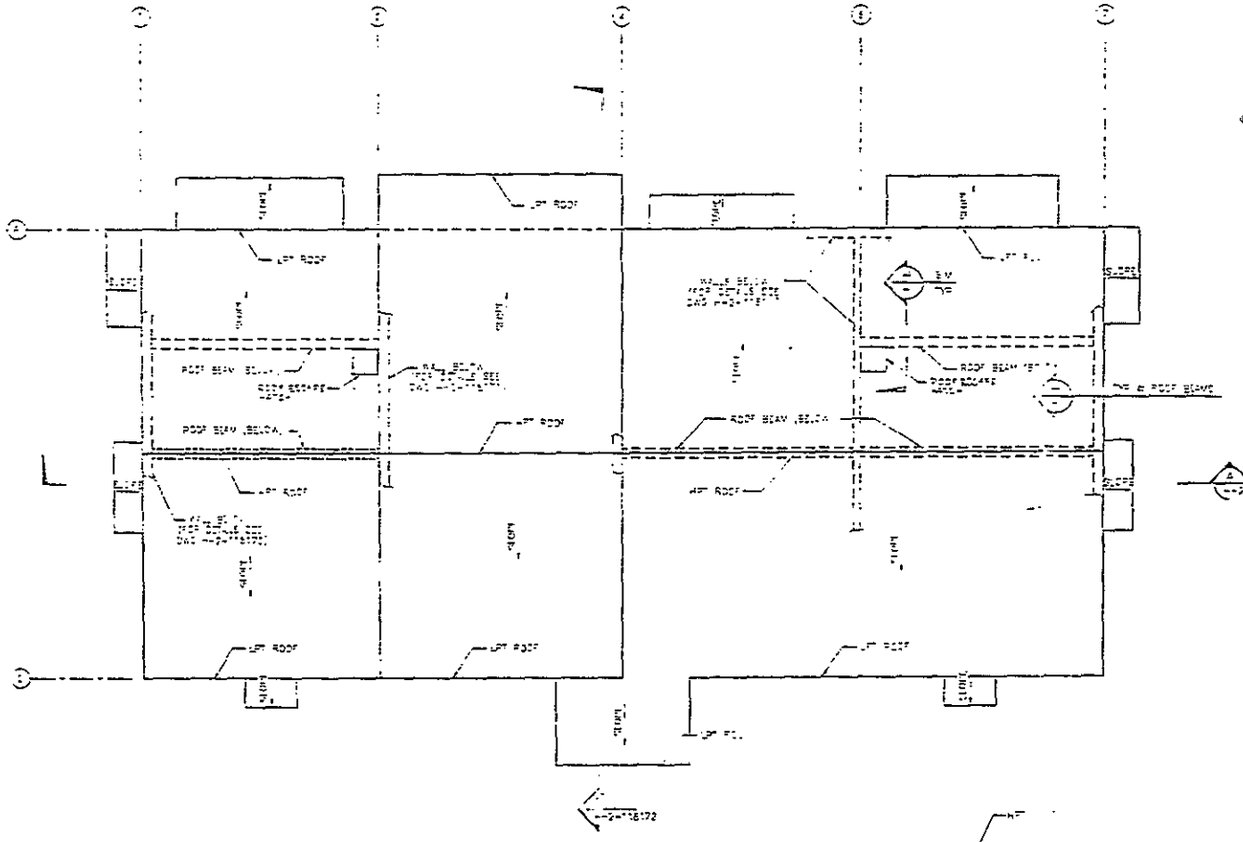
HANFORD WASTE VITRIFICATION PLANT

B-595 | 845724 | 3107

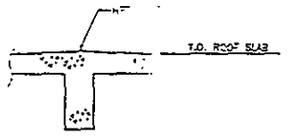
8

NONE | NOT REQ'D

9 1 1 1 1 1 6




ROOF PLAN




SECTION H

NOTE:
1. FOR NOTES SEE DRAWING H-2-118170.

C 5 10 15 20
REDUCED PRINT SCALE

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| REV | DATE | REVISION DESCRIPTION | APPROVAL INITIALS |
|---|---|---|---|
| 0 | | | |
| 00 | | RELEASED FOR DETAILED DESIGN | |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-88RL10930

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SWITCHGEAR BUILDING
ROOF PLAN

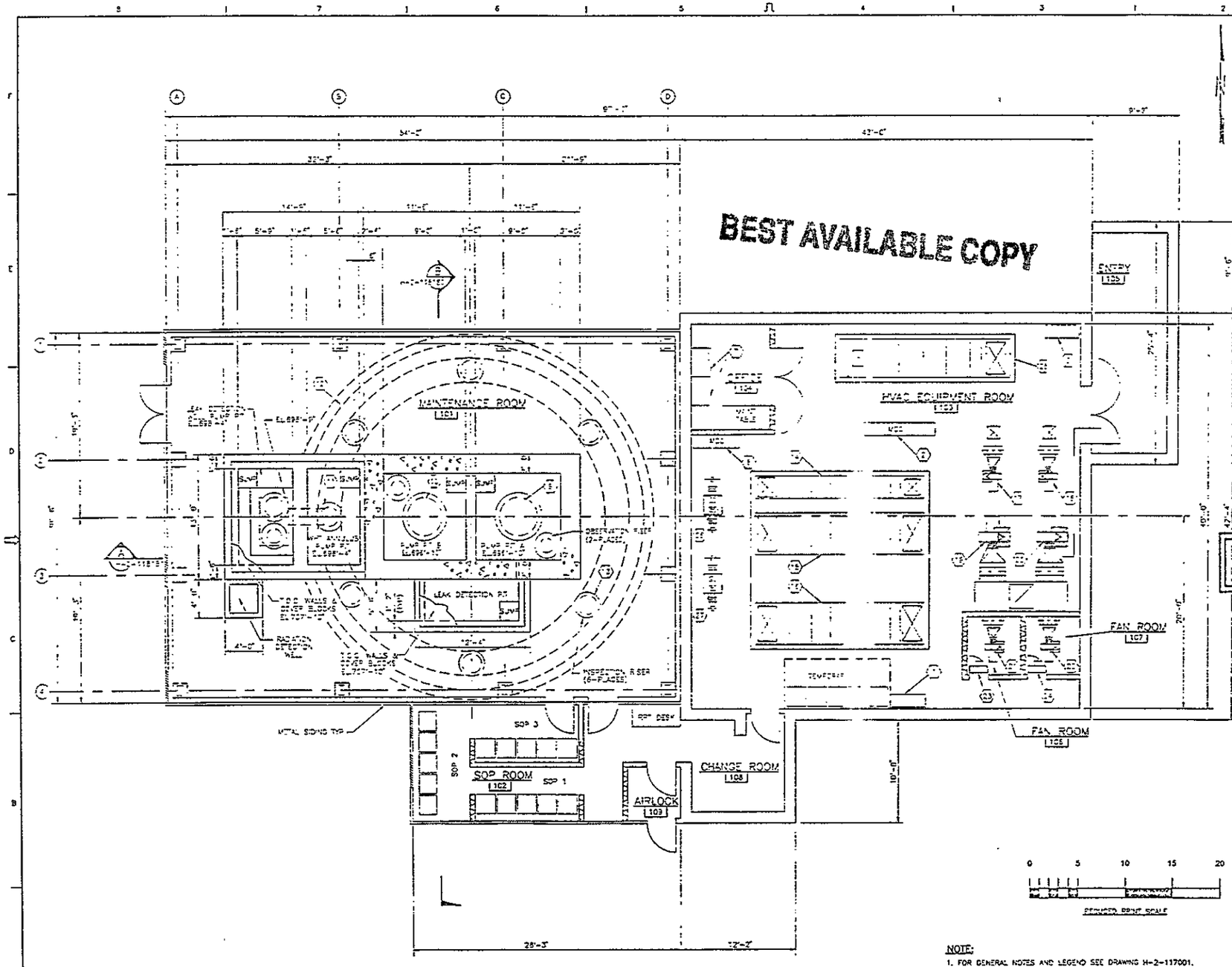
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 9-595 | 845724 | | |
| 1/8"=1'-0" | 8 | | |
| NONE | FACT REQ'D | H-2-118174 | 1 1 C |

AUTOCAD

H2118174
11 AUG 90
LDD = V.K.

9 1 1 2 1 1 6




PLAN @ EL 707'-0"
(UNLESS NOTED OTHERWISE)

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

EQUIPMENT LIST

| QTY | EQUIPMENT NUMBER | HP/KW | DESCRIPTION |
|---|---|---|---|
| 1 | MCC-23A-222 | 75-HP | MOTOR CONTROL CENTER |
| 2 | MCC-23B-222 | 75-HP | MOTOR CONTROL CENTER |
| 3 | MCC-23C-222 | 75-HP | MOTOR CONTROL CENTER |
| 4 | [illegible] | 75-HP | CENTRALIZED UNINTERRUPTIBLE POWER SUPPLY UNIT (TCS 5) |
| 5 | MCC-23D-222 | 75-HP | MOTOR CONTROL CENTER |
| 6 | PU-23A-205A | 10-HP | WHT TRANSFER PUMP A |
| 7 | PU-23A-205B | 10-HP | WHT TRANSFER PUMP B |
| 8 | PU-23A-222 | 10-HP | WHT ANNULUS AND LEAK DETECTION WELL PUMP |
| 9 | T-23A-212 | - | WASTE HOLD TANK |
| 10 | FN-23A-201 | 10-HP | WHT ANNULUS FAN |
| 11 | FN-23A-202 | 10-HP | WHT EQ & FILTER PLENUM |
| 12 | FN-23A-203 | 10-HP | WHT EXHAUST FILTER PLENUM |
| 13 | FN-23A-204 | 10-HP | WHT EXHAUST FILTER PLENUM |
| 14 | B-23A-201 | 5-HP | WHT EQUIP ROOM EXHAUST FAN |
| 15 | B-23A-202 | 5-HP | WHT EQ & ROOM EXHAUST FAN |
| 16 | B-23A-203 | 5-HP | WHT TRANSFER MODE EXHAUST FAN |
| 17 | B-23A-204 | 5-HP | WHT TRANSFER MODE EXHAUST FAN |
| 18 | B-23A-205 | 5-HP | WHT NORMAL MODE EXHAUST FAN |
| 19 | B-23A-206 | 5-HP | WHT NORMAL MODE EXHAUST FAN |
| 20 | B-23A-222 | 5-HP | FAN ROOM EXHAUST FAN |
| 21 | B-23A-223 | 5-HP | FAN ROOM EXHAUST FAN |
| 22 | [illegible] | 10-HP | WHT S BRA FAN |
| 23 | FN-23A-224 | 5-HP | ANNULUS EXHAUST FILTER PLENUM |
| 24 | FN-23A-225 | 5-HP | ANNULUS EXHAUST FILTER PLENUM |

| REV | DATE | DESCRIPTION | BY | CHK | APP |
|---|---|---|---|---|---|
| C | | FASTED CHANGE ROOM 108 & AIRLOCK 109 ADD EQ. # 23 & 24 TO FAN RM EXHAUST FAN RELOCATED EQUIP 1,2,3,7,8 & WAST TANK HADDED RPT DESK & RELEASED FOR PROJECT BASELINE CONTROL PER CP NO HHH-0-0-0 | | | |
| 01 | | CHANGED RM 104 WALLS FROM CONC TO STUDWALL PER CR 441 | JRR | RPC | RPK / ERJ |
| | | | JLS | FGS | CPC / RNG |
| CD | | RELEASED FOR DETAILED DESIGN | ICE | | RPK / ERJ |
| | | | JLS | FGS | CPC / RNG |

ENGINEERING RELEASE
REV _____ DATE _____
DEO

| | |
|---|---|
| R. GIBBONS | 10/25/90 |
| D. CHAWLA | 10/26/90 |
| P. BROOKS | 10/26/90 |
| J. SMITS | 10/17/90 |
| E. JACOBS | 10/18/90 |
| R. KUMAR | 10/19/90 |
| P. GRANT | 10/19/90 |
| V. KOLDRE | 10/19/90 |
| C. FAULKNER | 10/19/90 |

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-[illegible]

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
WHT BUILDING
FLOOR PLAN

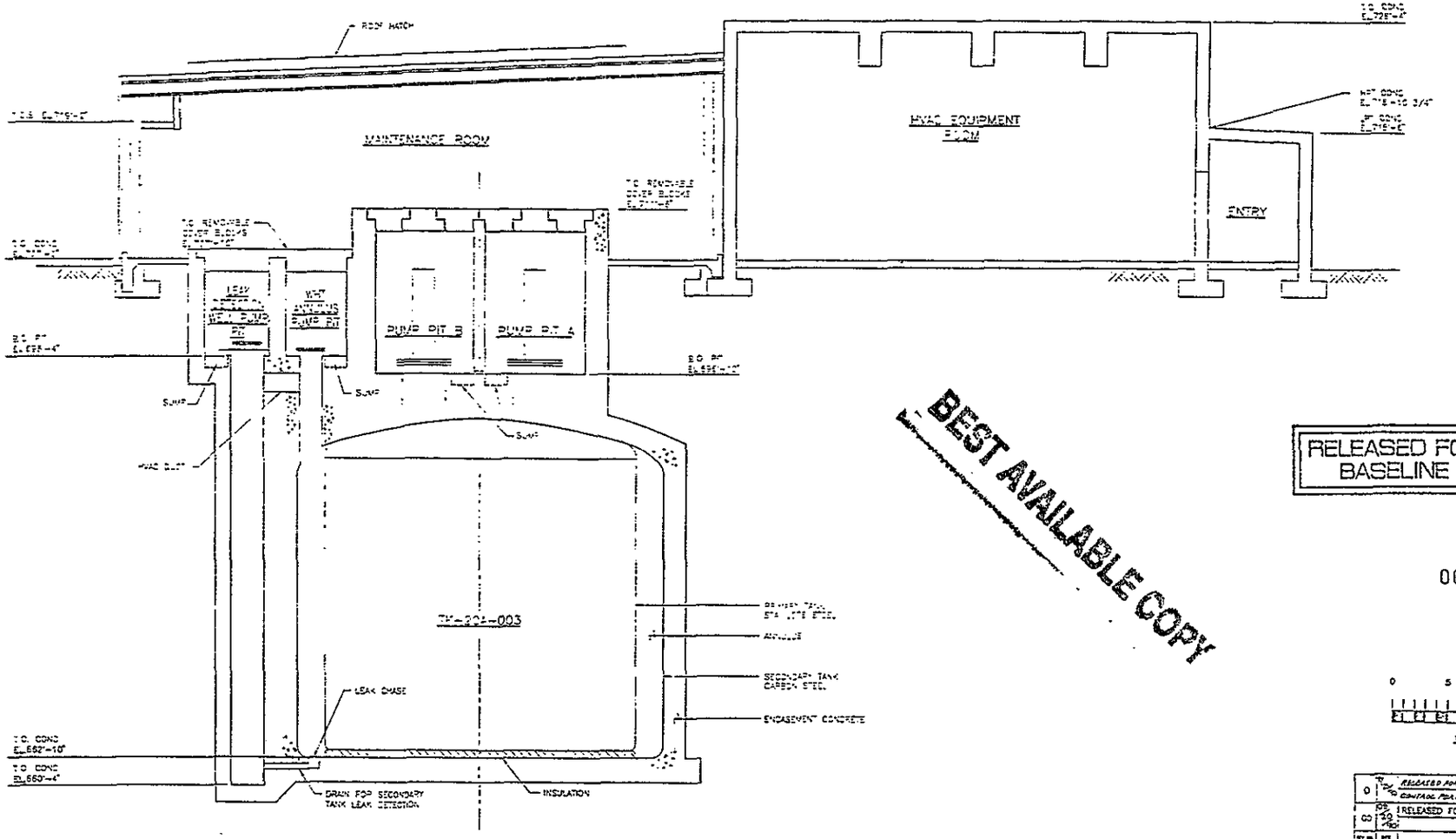
HANFORD WASTE VITRIFICATION PLANT

| | | | |
|---|---|---|---|
| 9-595 | 845724 | | |
| 1/4"=1'-0" | 9 | | |
| NONE | NOT REQ'D | H-2-118180 | 0 |

NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

0 5 10 15 20
DENOTED PRINT SCALE

AUTOCAD 1
00218180
18 OCT 90
LEO = VJC




SECTION A H-2-118182

NOTE:
1. FOR NOTES SEE DRAWING H-2-118180.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

| | |
|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL |
| CD 1 | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV. ____ DATE ____
CPC

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
P.O. Box 550, Richland, Wash.

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
WHT BUILDING
SECTION A

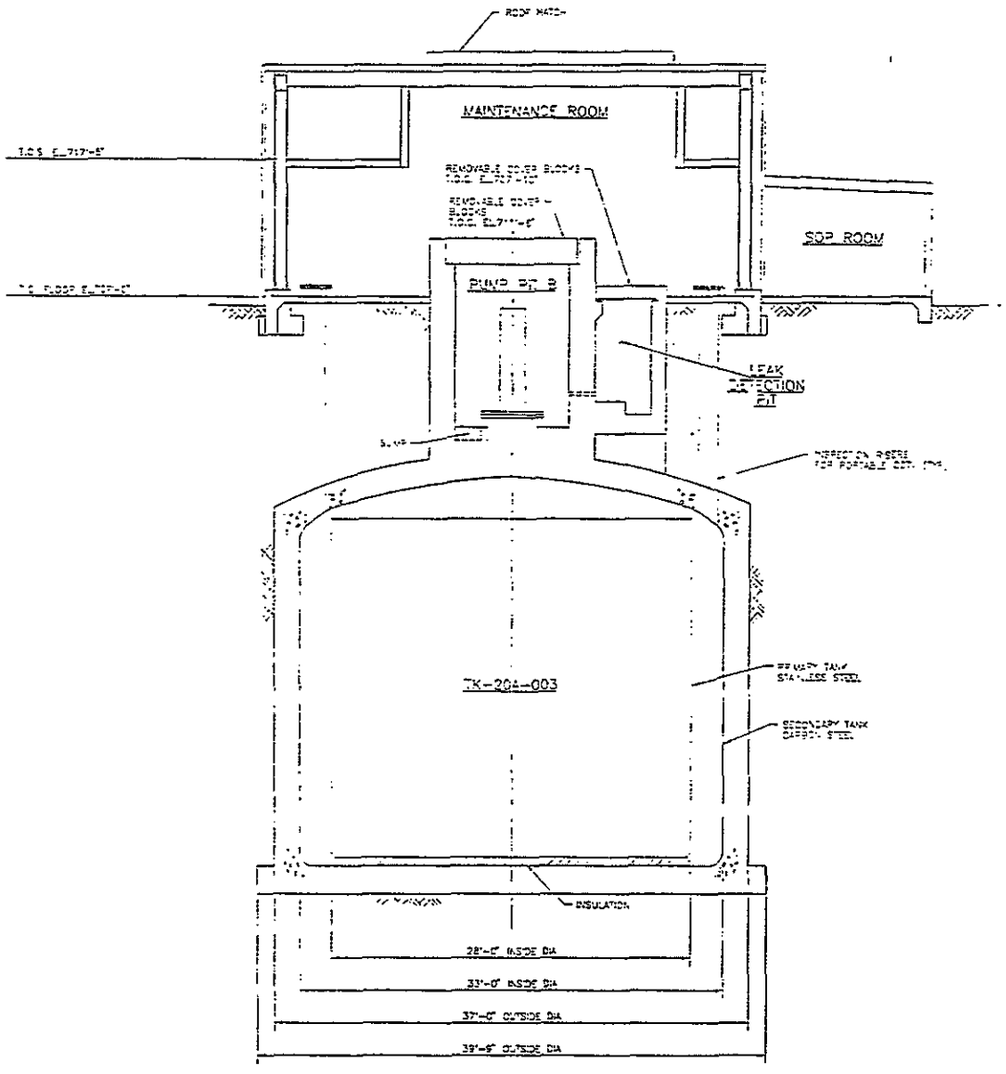
HANFORD WASTE VITRIFICATION PLANT

B-595 B45724 3107
9

NOVE NOT REQ'D H-2-118181 1 0

AUTOCAD 1 02218181 11 AUG 90 ECO = JAC

9112116




SECTION B H-2-118180

NOTE:
1. FOR NOTES SEE DRAWING H-2-118180.

BEST AVAILABLE COPY

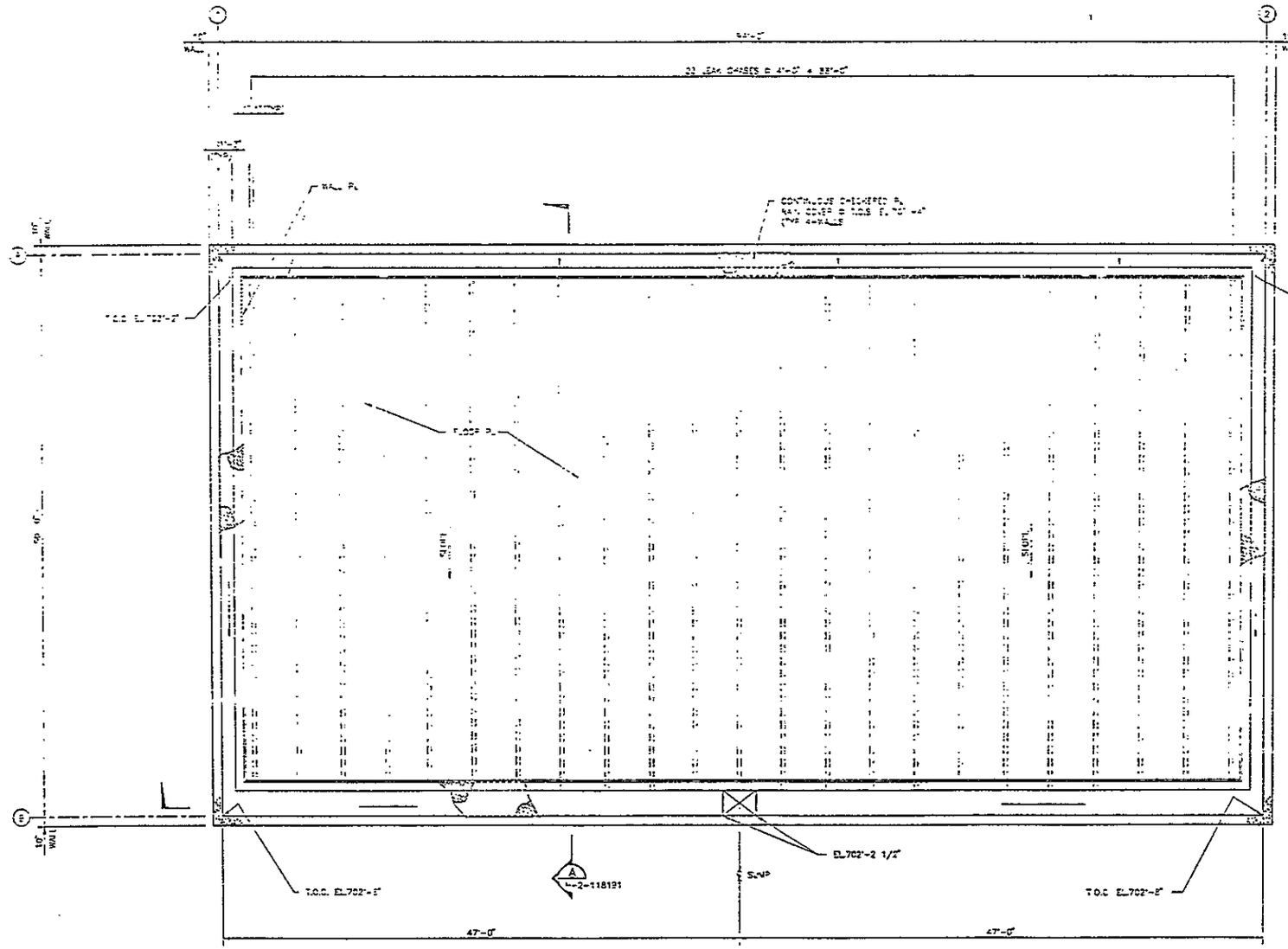
RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

REDUCED PRINT SCALE

| | |
|---|---|
| RELEASED FOR DETAILED DESIGN | |
| U.S. DEPARTMENT OF ENERGY | |
| FLUOR DANIEL, INC. ADVANCED TECHNOLOGY DIVISION | |
| GENERAL ARRANGEMENT WHT BUILDING SECTION B | |
| HANFORD WASTE VITRIFICATION PLANT | |
| 1/4"=1'-0" | 9 |
| NOT REQ'D | H-2-118182 |
| AUTOCAD | |

9112100 2




PLAN

NOTE:
1. FOR GENERAL NOTES AND LEGEND SEE DRAWING H-2-117001.

BEST AVAILABLE COPY

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

| | |
|---|---|
| 0 | RELEASED FOR PROJECT BASELINE CONTROL, PER CR NO. H-2-[illegible] |
| CD | RELEASED FOR DETAILED DESIGN |

ENGINEERING RELEASE
REV ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-87RL10928

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SOLAR EVAPORATION TANK
PLAN

HANFORD WASTE VITRIFICATION PLANT

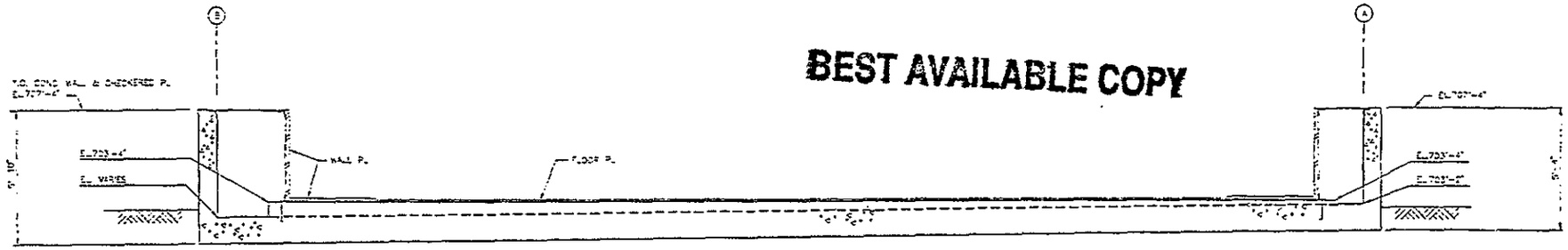
| | | | |
|---|---|---|---|
| NONE | NOT REQ'D | H-2-118190 | 0 |

AUTOCAD

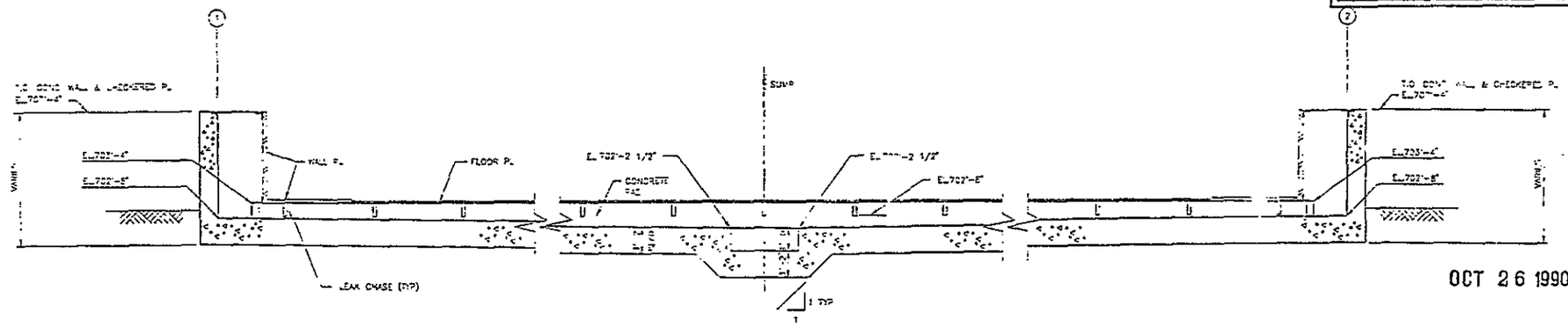
00218190
10 AUG 90
LEO = CDF

9 1 1 2 1 1 7 1 1 7 . 3

BEST AVAILABLE COPY




SECTION A
H-2-118190




SECTION B
H-2-118190

RELEASED FOR PROJECT BASELINE CONTROL

OCT 26 1990

0 5 10 15 20
REDUCED PRINT SCALE

NOTE:
1. FOR NOTES SEE DRAWING H-2-118190.

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| D | RELEASED FOR PROJECT BASELINE CONTROL, PER CR NO. PNWP-2442 | | |
| CD | RELEASED FOR DETAILED DESIGN | | |

ENGINEERING RELEASE
REV. ____ DATE ____

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
P.O. Box 550, Richland, WA 99352

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

GENERAL ARRANGEMENT
SOLAR EVAPORATION TANK
SECTIONS & DETAILS

HANFORD WASTE VITRIFICATION PLANT

| | | |
|---|---|---|
| 649724 | 3107 | |
| 12 | | |

NONE | NOT RECD | H-2-118191 | 1 | 1

AUTOCAD 1 D0218191