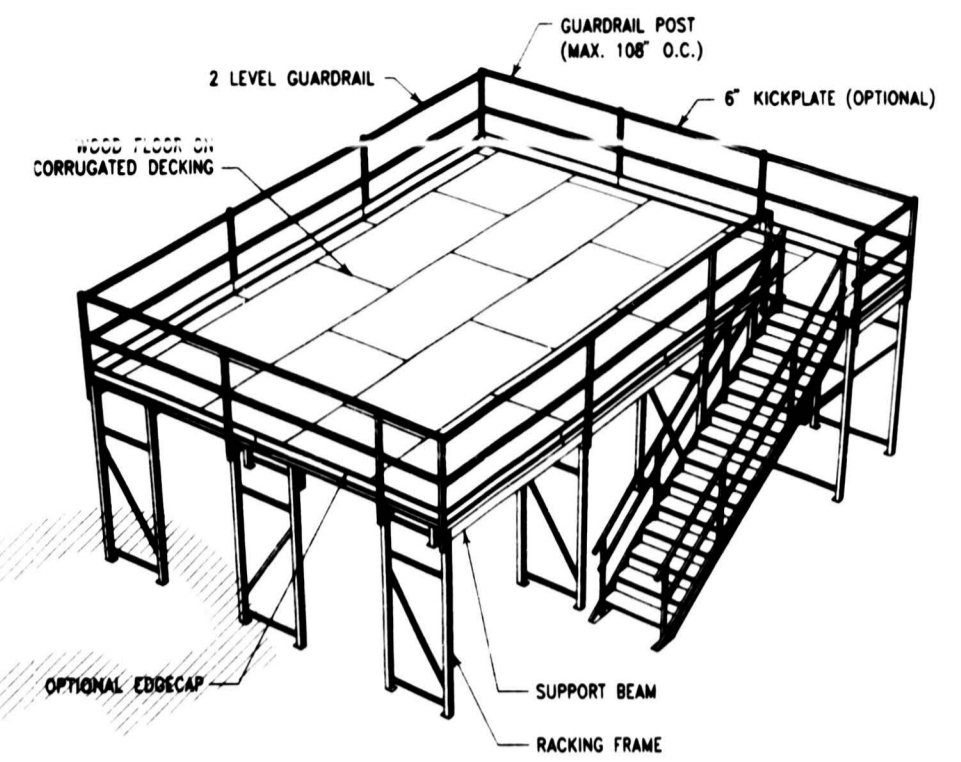


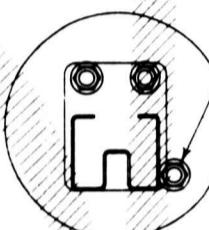
FLOOR PLAN

GENERAL NOTES

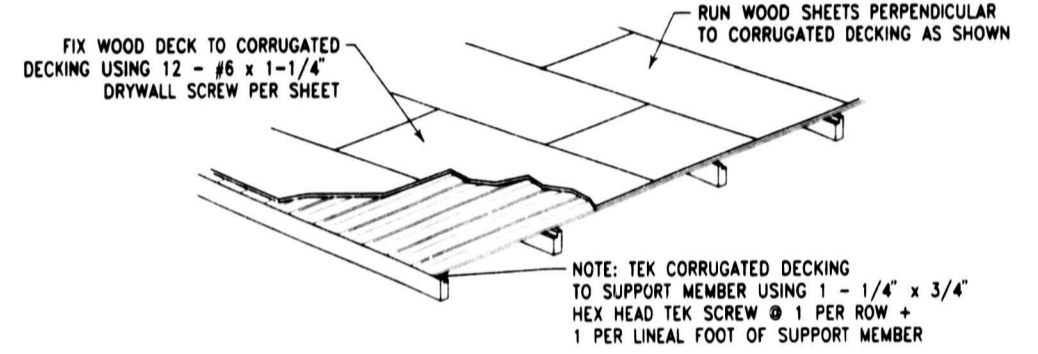
- 1) CONFIRM ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF THE WORK.
- 2) REPORT DISCREPANCIES TO THE INSTALLATION SUPERVISOR BEFORE PROCEEDING. THE ENGINEER-OF-RECORD AND THE CUSTOMER MUST APPROVE CHANGES.
- 3) RACK SHOULD BE INSTALLED PLUMB AND SQUARE. SHIMMING MAY BE REQUIRED AS MOST FLOORS ARE NOT PERFECTLY LEVEL. PERMISSIBLE TOLERANCE FROM PLUMB IS 1/4" FOR EVERY 10'-0" OF FRAME ELEVATION.
- 4) RACK COMPONENTS MUST BE A MINIMUM OF 6" FROM WALLS, COLUMNS, MACHINERY, ETC., IN BOTH THE DOWN-AISLE AND CROSS-AISLE DIRECTIONS, UNLESS NOTED OTHERWISE.
- 5) INSTALL 1 LOCKING PIN PER BEAM BRACKET, UNLESS NOTED OTHERWISE.
- 6) INSTALL ROW SPACERS BETWEEN BACK-TO-BACK FRAMES AT INTERVALS NOT TO EXCEED 8'-0". IF FRAMES ARE ANCHORED, FIRST ELEVATION MAY BE UP TO 8'-0" FROM FLOOR LEVEL, OTHERWISE < 2'-0".
- 7) ANCHORS MUST BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MINIMUM EMBEDMENT IS ANCHOR LENGTH MINUS 1/2". UNLESS NOTED OTHERWISE.
- 8) COMPLIANCE WITH BUILDING AND APPLICABLE FIRE CODES, BY-LAWS AND REQUIRED PERMITS, IF ANY, ARE THE OWNER'S RESPONSIBILITY.
- 9) SEISMIC ANALYSIS & DESIGN OF NEW AND/OR USED IN "AS-BUILT" (NO RUST, DAMAGE, ETC.) CONDITION MULTI-LEVEL RACK AND/OR SHELVING MEETS THE SEISMIC RESISTANCE REQUIREMENT OF THE BCBC 1998 PART 4: STRUCTURAL DESIGN.
- 10) SEISMIC DATA USED FOR THIS ANALYSIS: v=0.2, Z<sub>a</sub>=Z<sub>v</sub>=4
- 11) DAMAGED RACK AND/OR SHELVING MUST BE UNLOADED IMMEDIATELY AND NOT RETURNED TO SERVICE UNTIL THE DAMAGED COMPONENTS ARE REPLACED OR REPAIRS ARE COMPLETED. ALL SUCH REPAIRS SHOULD BE COMPLETED BY A COMPETENT PERSON.



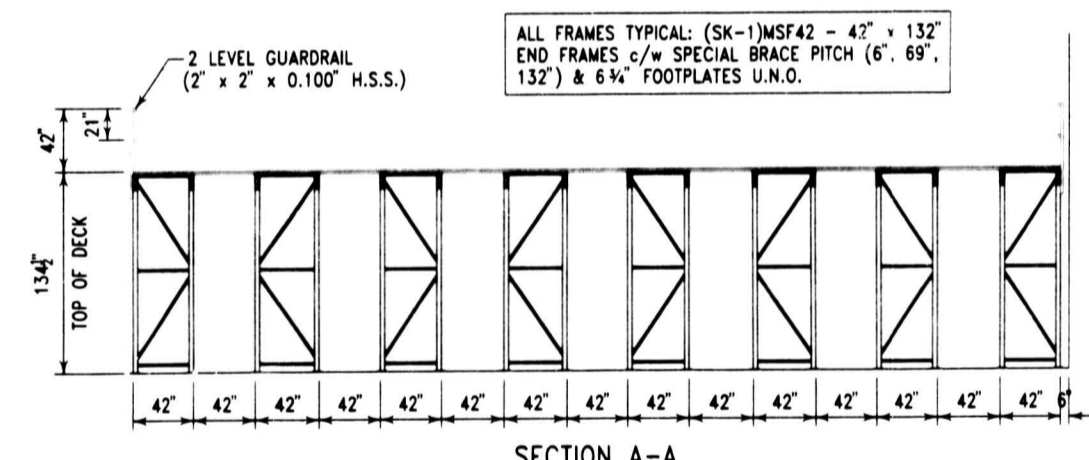
TYPICAL VIEW OF RACK SUPPORTED PLATFORM



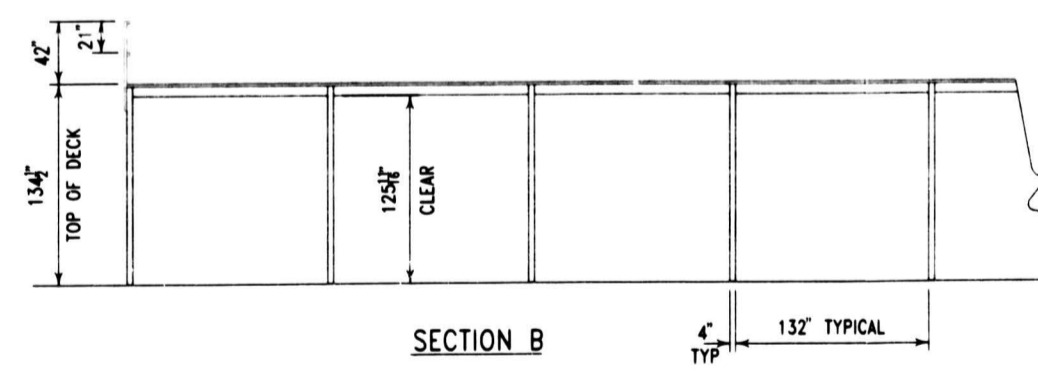
ANCHORING DETAIL



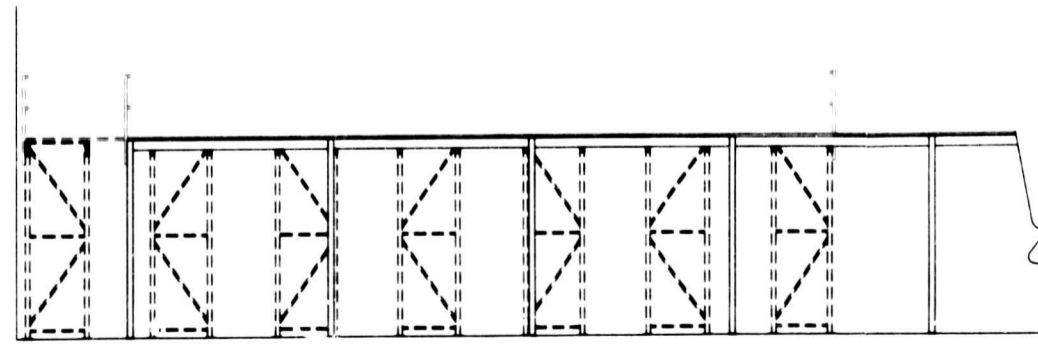
DECKING DETAIL



SECTION A-A



SECTION B



SECTION C  
-RACK SHOWN AS DASHED LINES INDICATES RACK IN BACKGROUND.

*SEE MARKED UP SET FOR PERMIT CONDITIONS*

**INSTALLATION SIGN-OFF**

INSTALLER: THIS INSTALLATION IS COMPLETE AS PER THE SPECIFICATIONS ON THIS DRAWING.  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

INSPECTOR: THIS INSTALLATION HAS BEEN INSTALLED AS PER THE SPECIFICATIONS ON THIS DRAWING.  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

CUSTOMER: I/WE ARE SATISFIED WITH THE INSTALLATION AS PER OUR PURCHASE ORDER.  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

**\* WARNING \***

THIS DRAWING IS THE PROPERTY OF ARPAC STORAGE SYSTEMS CORPORATION. REPRODUCTION IN FULL OR IN PART IS PROHIBITED WITHOUT WRITTEN PERMISSION FROM ARPAC.

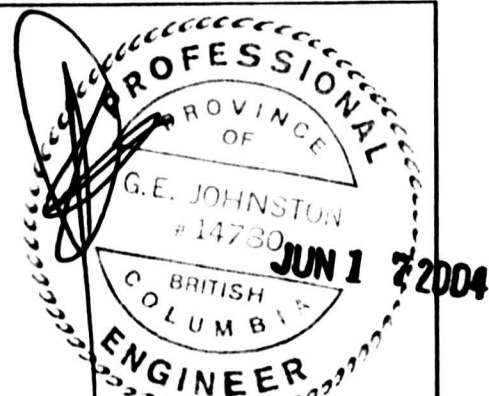
THIS DRAWING IS TO PROVIDE INSTRUCTION FOR INSTALLATION OF PRODUCTS PROVIDED BY ARPAC. ANY AND ALL USE OF THIS DRAWING BY OTHERS IS AT THEIR SOLE RISK.

|             |   |
|-------------|---|
| NO.         | 03(KO)<br>02(GG)<br>01(MK)  |
| REVISION    | UPDATED PATHWAY LAYOUT MODIFIED FOR PERMIT PACKAGE FUTURE MEZZANINE ADDED. PLAN REVISED |
| DATE        | JUNE 3/04<br>APRIL 21/04<br>MAR.16  |
| DRAWING NO. | 03-192  |
| SCALE       | 1/4" = 1'-0"  |
| REVISION    | 03  |
| APPROD BY:  | MK  |
| DATE        | Sept. 12/03   |
| ISSUE DATE  |   |
| SHEET       | 1/2   |
| DRAWN BY    | MK  |

**SANDY'S FURNITURE**  
 1450 BRIGANTINE DRIVE, COQUITLAM, BC

**ARPAC**  
 ARPAC STORAGE SYSTEMS CORPORATION

# CALCULATION SUMMARY



**CONTRACTOR:**  
 ABLAZE PROTECTION SYSTEMS INC.

**PROJECT:**  
 SANDY'S FURNITURE, 1400 1854 BRIGANTINE DRIVE, COQUITLAM, B.C.

**DESIGN CRITERIA:**

- ALL SPRINKLER SYSTEMS ARE DESIGNED TO NFPA 13 1999, THE B.C.B.C. 1998 AND THE G.H.L. BUILDING CODE EQUIVALENCY REPORT DATED MAY 26 2004.
- NEW UNDER MEZZ. SPRINKLERS : ORD. HAZ. GP.2 ; 0.20GPM/SQ.FT. OVER 1500 SQ.FT.
- EXISTING ROOF DESIGN : 22'-0" HIGH STORAGE OF CLASS 3 NON ENCAPSULATED COMMODITY ; 0.481USGPM/SQ.FT. OVER 2000 SQ.FT.
- 100 GPM INSIDE HOSE ADDED AT BASE OF RISER.
- 150 GPM OUTSIDE HOSE ADDED AT CITY CONNECTION FOR ORD HAZ. AREAS.
- STATIC LOSS FOR 8"Ø WILKINS DETECTOR BACK FLOW PREVENTER IS :  
 - 3 PSI AT 1500 GPM.
- ALL STEEL PIPE 1.5"Ø AND UP TO BE LW. U.N.O.
- ALL STEEL PIPE 1.25"Ø AND DOWN TO BE SCH.40 U.N.O.
- ALL SPRINKLERS TO BE INSTALLED AS PER THEIR LISTINGS AND NFPA 13
- ALL SPRINKLER EQUIPMENT TO BE ULC LISTED.
- HANGERS FOR ALL AREAS TO BE 3/8" J RODS C/W 3/8" ROD AND ADJUSTABLE PIPE RINGS.
- ALL SPRINKLER PIPE AND MAT'L. TO BE INSTALLED AS PER NFPA 13 1999.
- ALL SPRINKLER MAINS TO BE SWAY BRACED AS PER NFPA 13 1999.

- 4 WAY SWAY BRACE AS PER NFPA 13.

- 2 WAY SWAY BRACE AS PER NFPA 13.

| CALCUTATED AREA | DENSITY USGPM/SQ.FT. | REQ'D FLOW AT CITY CONNECTION | REQ'D PRESSURE AT CITY CONNECTION |
|-----------------|----------------------|-------------------------------|-----------------------------------|
| CALC - SF1      | 0.20 GPM/1500SQ.FT.  | 646.84 GPM                    | 101.822 PSI                       |

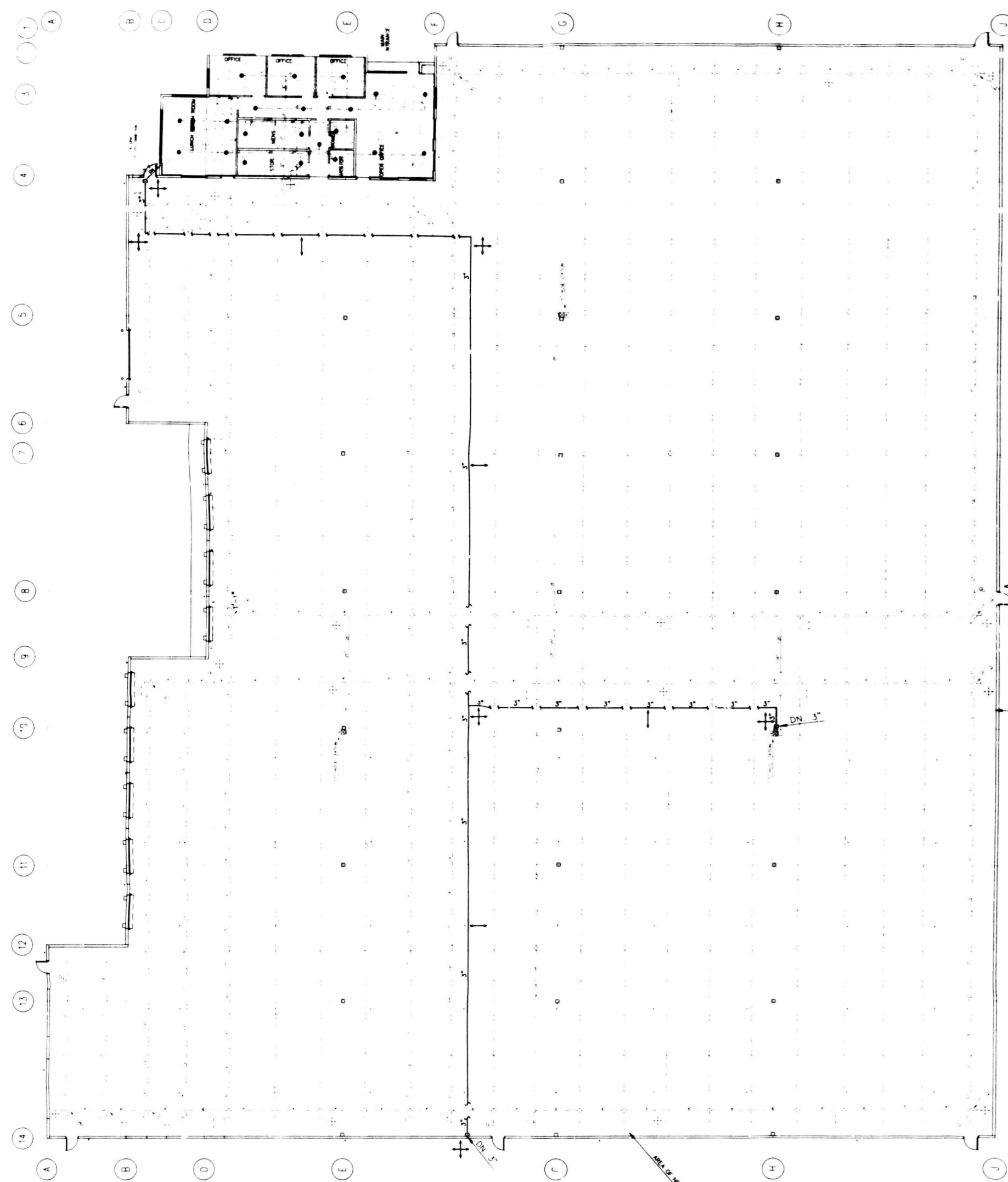
**RECEIVED**  
 JUN 25 2004  
 CITY OF COQUITLAM  
 PLANNING AND DEVELOPMENT DEPT.

HYDRAULIC CALCULATIONS -- PIPE CHARACTERISTICS

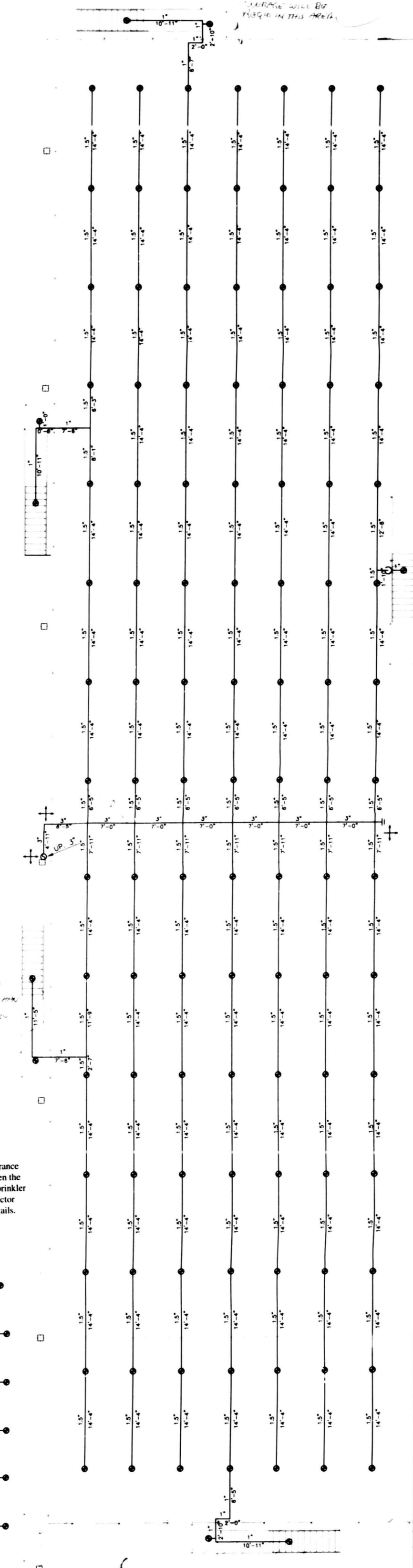
| COMPANY: ABLAZE PROTECTION SYSTEMS INC.<br>DESIGNER: MARK WRIGHT / WRIGHT DESIGN CONCEPTS.<br>CLIENT: SANDY'S FURNITURE, 1450 BRIGANTINE, COQUITLAM, B.C.<br>PROJECT: NEW MEZZ SPRINKLERS: 0.20 USGPM/SQ.FT. OVER 1500 SQ.FT.<br>JOB NO.: WDC-0418 CALC-SF1 |            |               |                        |                           |                 |                  |                   |                         |                           |                        |                       | PAGE 1 OF 1<br>DATE 2004 JUN 14 |                         |                     |
|---|------------|---------------|------------------------|---------------------------|-----------------|------------------|-------------------|-------------------------|---------------------------|------------------------|-----------------------|---------------------------------|-------------------------|---------------------|
| PIPE NO.  | PIPE NODES | FLOW (US GPM) | PIPE DIAMETER NOM (IN) | PIPE DIAMETER ACTUAL (IN) | PIPE/FTG CODE # | PIPE LENGTH (FT) | TOTAL LENGTH (FT) | HEAD LOSS PER FT. (PSI) | HEAD LOSS OVER PIPE (PSI) | STATIC HEAD LOSS (PSI) | TOTAL HEAD LOSS (PSI) | ROUGHNESS COEFF                 | WATER VELOCITY (FT/SEC) | VELOC. PRESS. (PSI) |
| 1   | 2 1        | 25.03         | 1                      | 1.05                      | CSAM 2SE        | 18.1 4.0         | 22.1              | 0.198                   | 4.366                     | -2.598                 | 1.767                 | 120                             | 9.293                   | 0.581               |
| 2   | 3 2        | 50.96         | 1 1/2                  | 1.75                      | CSDP            | 14.8             | 14.8              | 0.0607                  | 0.895                     | 0.000                  | 0.895                 | 120                             | 6.782                   | 0.310               |
| 3   | 4 3        | 77.19         | 1 1/2                  | 1.75                      | CSDP            | 14.8             | 14.8              | 0.131                   | 1.930                     | 0.000                  | 1.930                 | 120                             | 10.272                  | 0.710               |
| 4   | 20 4       | 104.21        | 1 1/2                  | 1.75                      | CSDP            | 45.7             | 57.7              | 0.228                   | 13.172                    | 0.000                  | 13.172                | 120                             | 13.868                  | 1.294               |
| 5   | 6 5        | 25.38         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0167                  | 0.234                     | 0.000                  | 0.234                 | 120                             | 3.378                   | 0.0768              |
| 6   | 7 6        | 50.72         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0601                  | 0.842                     | 0.000                  | 0.842                 | 120                             | 6.750                   | 0.307               |
| 7   | 8 7        | 76.34         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.128                   | 1.795                     | 0.000                  | 1.795                 | 120                             | 10.160                  | 0.695               |
| 8   | 21 8       | 102.70        | 1 1/2                  | 1.75                      | CSDP            | 52.8             | 64.8              | 0.222                   | 14.395                    | 0.000                  | 14.395                | 120                             | 13.668                  | 1.257               |
| 9   | 10 9       | 25.47         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0168                  | 0.235                     | 0.000                  | 0.235                 | 120                             | 3.389                   | 0.0773              |
| 10  | 11 10      | 50.89         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0605                  | 0.847                     | 0.000                  | 0.847                 | 120                             | 6.773                   | 0.309               |
| 11  | 12 11      | 76.59         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.129                   | 1.806                     | 0.000                  | 1.806                 | 120                             | 10.193                  | 0.699               |
| 12  | 22 12      | 103.04        | 1 1/2                  | 1.75                      | CSDP            | 52.8             | 64.8              | 0.223                   | 14.482                    | 0.000                  | 14.482                | 120                             | 13.713                  | 1.266               |
| 13  | 14 13      | 28.90         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0212                  | 0.297                     | 0.000                  | 0.297                 | 120                             | 3.846                   | 0.0995              |
| 14  | 15 14      | 57.74         | 1 1/2                  | 1.75                      | CSDP            | 14.0             | 14.0              | 0.0764                  | 1.070                     | 0.000                  | 1.070                 | 120                             | 7.685                   | 0.397               |
| 15  | 23 15      | 86.89         | 1 1/2                  | 1.75                      | CSDP            | 52.8             | 64.8              | 0.163                   | 10.562                    | 0.000                  | 10.562                | 120                             | 11.564                  | 0.900               |
| 16  | 21 20      | 104.21        | 3                      | 3.36                      | CSDP            | 7.0              | 7.0               | 0.00962                 | 0.0674                    | 0.000                  | 0.0674                | 120                             | 3.780                   | 0.0961              |
| 17  | 22 21      | 206.91        | 3                      | 3.36                      | CSDP            | 7.0              | 7.0               | 0.0343                  | 0.240                     | 0.000                  | 0.240                 | 120                             | 7.505                   | 0.379               |
| 18  | 23 22      | 309.95        | 3                      | 3.36                      | CSDP            | 7.0              | 7.0               | 0.0724                  | 0.507                     | 0.000                  | 0.507                 | 120                             | 11.242                  | 0.851               |
| 19  | 24 23      | 396.84        | 3                      | 3.36                      | CSDP            | 43.0             | 64.7              | 0.114                   | 7.404                     | -7.578                 | -0.174                | 120                             | 14.394                  | 1.394               |
| 20  | 90 24      | 396.84        | 3                      | 3.36                      | CSDP            | 346.8            | 418.0             | 0.114                   | 47.856                    | 11.042                 | 58.899                | 120                             | 14.394                  | 1.394               |
| 21  | 91 90      | 396.84        | 6                      | 6.39                      | CSEF            | 4.0              | 4.0               | 0.00499                 | 0.0200                    | 0.000                  | 0.0200                | 120                             | 3.976                   | 0.106               |
| 22  | 92 91      | 496.84        | 6                      | 6.39                      | CSEF            | 2.0              | 26.0              | 0.00757                 | 0.197                     | 0.000                  | 0.197                 | 120                             | 4.978                   | 0.167               |
| 23  | 93 92      | 496.84        | 8                      | 8.04                      | CPVC            | 180.0            | 231.7             | 0.00163                 | 0.377                     | 0.866                  | 1.243                 | 150                             | 3.137                   | 0.0662              |
| 24  | 100 93     | 646.84        | 8                      | 8.04                      | CPVC            | 1.0              | 29.8              | 0.00265                 | 0.0790                    | 0.000                  | 0.0790                | 150                             | 4.084                   | 0.112               |

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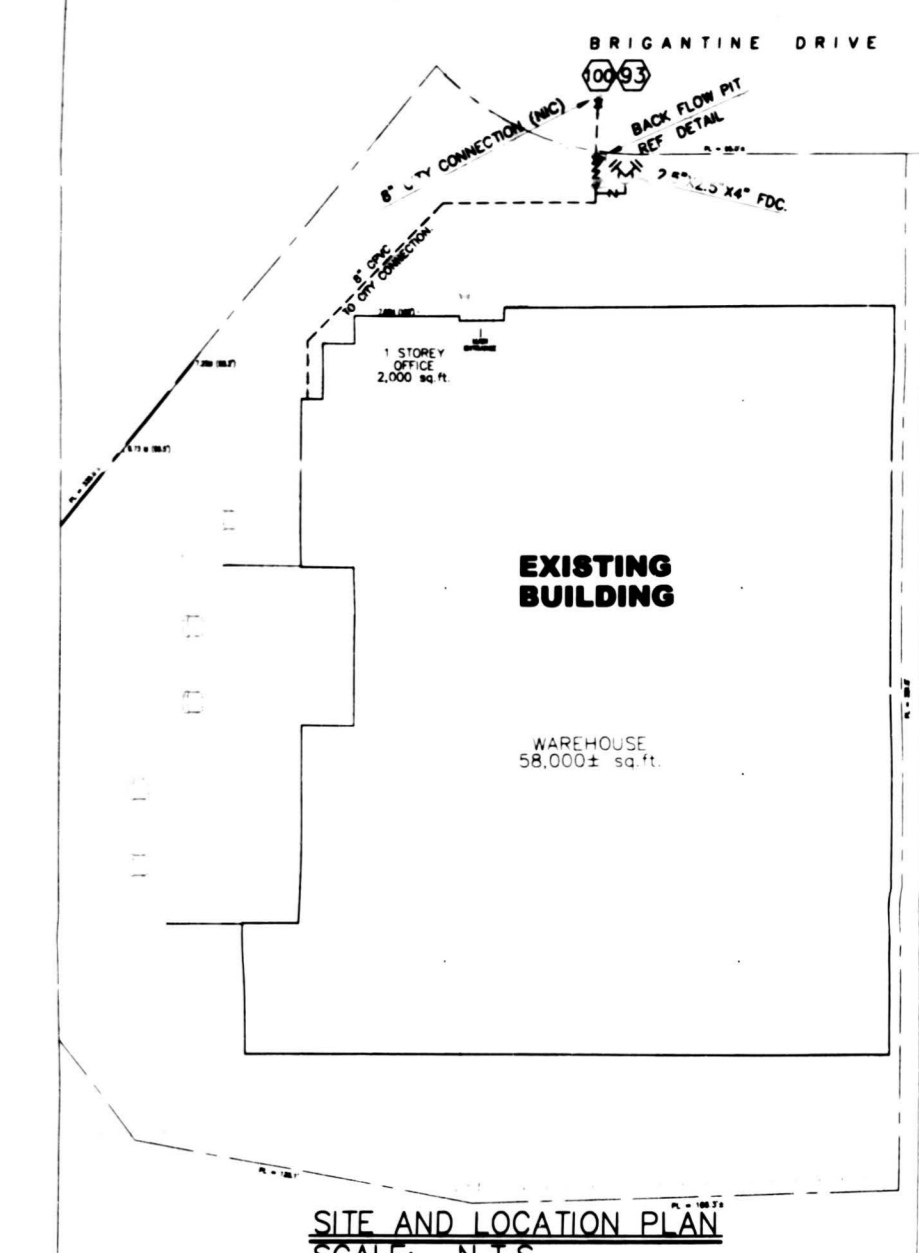




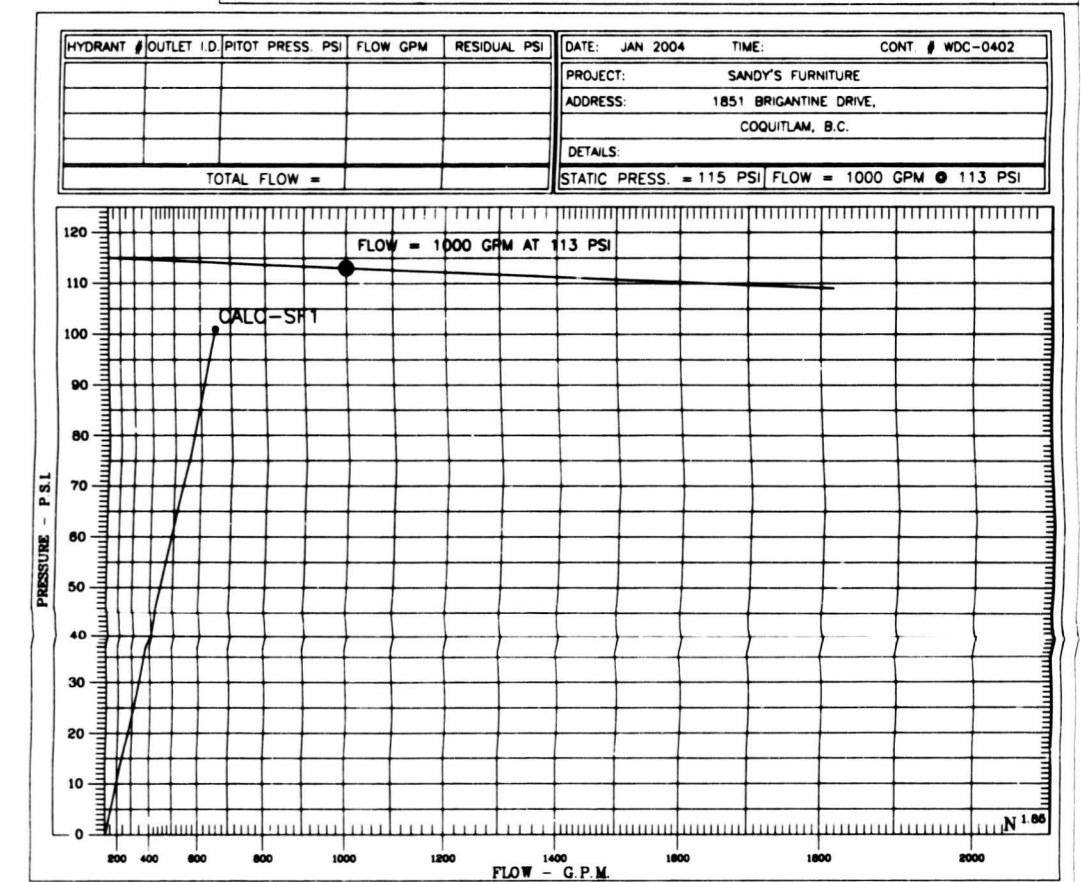
**EXISTING WAREHOUSE SPRINKLER PLAN**  
SCALE: 1/16"=1'-0"



**NEW MEZZ. PLAN**  
SCALE: 1/8"=1'-0"



**SITE AND LOCATION PLAN**  
SCALE: N.T.S.



**CALCULATION SUMMARY**

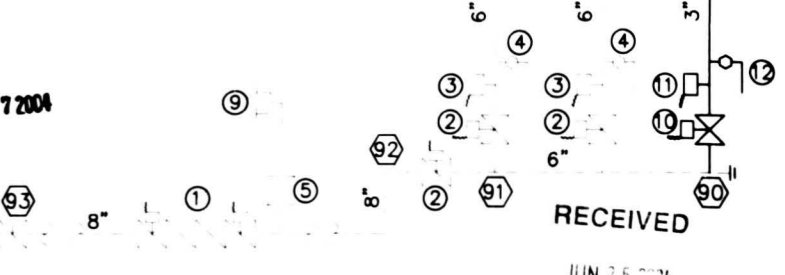
- DESIGN CRITERIA**
- ALL SPRINKLER SYSTEMS ARE DESIGNED TO NFPA 13 1999, THE B.C.B.C. 1998 AND THE G.H.L. BUILDING CODE EQUIVALENCY REPORT DATED MAY 26 2004.
  - UNDER MEZZ SPRINKLERS - ORD HAZ. GP 2.0 20GPM/SQ.FT. OVER 1500 SQ.FT.
  - EXISTING ROOF DESIGN - 22'-0" HIGH STORAGE OF CLASS 3 NON ENCAPSULATED COMMODITY - 0.481 USGPM/SQ.FT. OVER 2000 SQ.FT.
  - 100 GPM INSIDE HOSE ADDED AT BASE OF RISER.
  - 150 GPM OUTSIDE HOSE ADDED AT CITY CONNECTION FOR ORD HAZ. AREAS.
  - STATIC LOSS FOR 8" WILKINS DETECTOR BACK FLOW PREVENTER IS - 3 PSI AT 1500 GPM.
  - ALL STEEL PIPE 1 1/2" AND UP TO BE LW U.N.O.
  - ALL STEEL PIPE 1 1/2" AND DOWN TO BE SCH 40 U.N.O.
  - ALL SPRINKLERS TO BE INSTALLED AS PER THEIR LISTINGS AND NFPA 13.
  - ALL SPRINKLER EQUIPMENT TO BE UL LISTED.
  - HANGERS FOR ALL AREAS TO BE 3/8" J. RODS C/W 3/8" ROD AND ADJUSTABLE PIPE RINGS.
  - ALL SPRINKLER PIPE AND MATL. TO BE INSTALLED AS PER NFPA 13 1999.
  - ALL SPRINKLER MAINS TO BE SWAY BRACED AS PER NFPA 13 1999.
- + - 4 WAY SWAY BRACE AS PER NFPA 13  
 - - 2 WAY SWAY BRACE AS PER NFPA 13

| CALCULATED AREA | DENSITY USGPM/SQ.FT. | REQ'D FLOW AT CITY CONNECTION | REQ'D PRESSURE AT CITY CONNECTION |
|-----------------|----------------------|-------------------------------|-----------------------------------|
| CALC - SF1      | 0.20 GPM/1500SQ.FT.  | 646.84 GPM                    | 101.822 PSI                       |

- LEGEND**
- ① - EXISTING 8" WILKINS MODEL 350 DETECTOR BACK FLOW PREVENTER C/W TAMPER SWITCH
  - ② - EXISTING 6" BUTTER FLY VALVE C/W TAMPER SWITCH
  - ③ - EXISTING 6" FLOW SWITCH
  - ④ - EXISTING 2" TEST AND DRAIN
  - ⑤ - EXISTING 4" GR CHECK VALVE
  - ⑥ - EXISTING 8" CITY WATER CONNECTION C/W GATE VALVE (N.C.)
  - ⑦ - EXISTING 6" RISER TO WAREHOUSE ROOF SPRINKLER SYSTEM
  - ⑧ - EXISTING 6" RISER TO WAREHOUSE ROOF AND OFFICE SPRINKLER SYSTEM
  - ⑨ - EXISTING 2 1/2" X 1 1/2" X 4" F.D.C.
  - ⑩ - NEW 3" GR BUTTER FLY VALVE C/W TAMPER SWITCH
  - ⑪ - NEW 3" FLOW SWITCH
  - ⑫ - NEW 1 1/2" TEST AND DRAIN
  - ⑬ - NEW 3" RISER TO MEZZ. SPRINKLER SYSTEM

OFFICE COPY

27 July 04



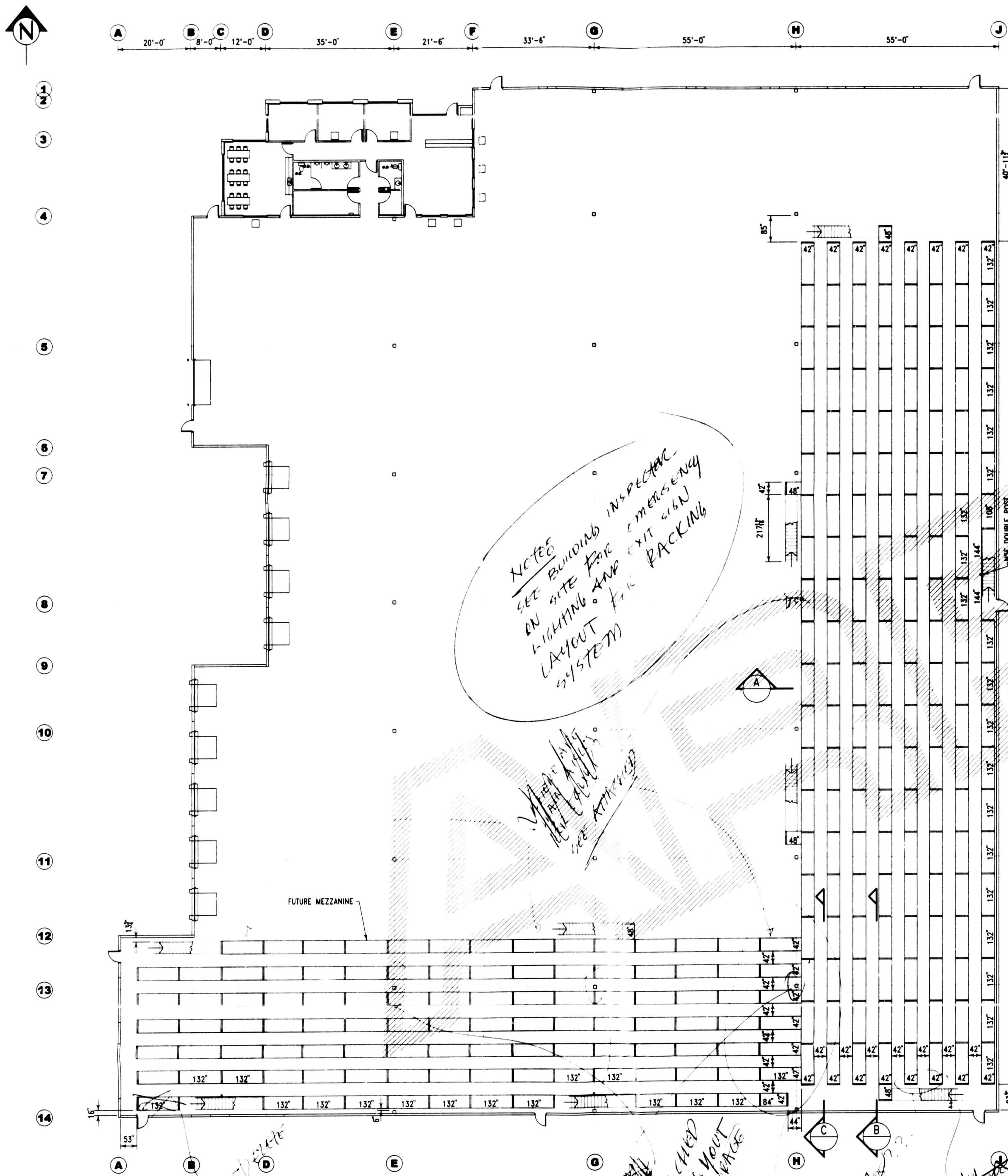
**EXISTING VALVE STATION DETAIL**  
SCALE: N.T.S.

If mezzanine flooring extends into these areas, then additional head coverage will be required under flooring.

A minimum of 18 in. clearance shall be maintained between the top of storage and ceiling sprinkler detectors. Consult Inspector regarding contraction details.

If mezzanine flooring extends into these areas, then additional head coverage will be required under flooring.

| <table border="1"> <thead> <tr> <th>REV.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | REV.        | DESCRIPTION | BY     | DATE |  |  |  |  | <table border="1"> <thead> <tr> <th>SPRINKLER SCHEDULE &amp; LEGEND</th> <th>QUANTITY</th> <th>UNIT</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>EXISTING SSU VICTALIC MODEL V27</td> <td>17,729</td> <td>SPRINK</td> <td>17,729</td> </tr> <tr> <td>EXISTING SSP OR VICTALIC MODEL V27</td> <td>1/2"</td> <td>CHR</td> <td>1</td> </tr> <tr> <td>NEW SSU OR VICTALIC MODEL V27</td> <td>1/2"</td> <td>BRASS</td> <td>185</td> </tr> <tr> <td>TOTAL COUNT THIS SHEET</td> <td></td> <td></td> <td>185</td> </tr> </tbody> </table> | SPRINKLER SCHEDULE & LEGEND | QUANTITY | UNIT | TOTAL | EXISTING SSU VICTALIC MODEL V27 | 17,729 | SPRINK | 17,729 | EXISTING SSP OR VICTALIC MODEL V27 | 1/2" | CHR | 1 | NEW SSU OR VICTALIC MODEL V27 | 1/2" | BRASS | 185 | TOTAL COUNT THIS SHEET |  |  | 185 | <b>CONTRACTOR</b><br><b>ABLAZE</b><br>PROTECTION SYSTEMS INC.<br>1037 STEWART AVE., COQUITLAM, B.C.<br>TEL/FAX: (604) 931-3942 | <b>DESIGN BY:</b><br><b>Wright Design Concepts</b><br>26668 112 TH AVE. WHONNOCK, B.C., V2X-1P7<br>TEL: (604) 618-9229 FAX: (604) 462-9320 | <table border="1"> <thead> <tr> <th>PROJECT NO.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>WDC - 0418</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>DRAWN BY:</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>MARK WRIGHT</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>SCALE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1/8" = 1'-0"</td> <td>JUN 15 04</td> </tr> </tbody> </table> | PROJECT NO. | DATE | WDC - 0418 |  | DRAWN BY: | DATE | MARK WRIGHT |  | SCALE | DATE | 1/8" = 1'-0" | JUN 15 04 | <table border="1"> <thead> <tr> <th>SHEET TITLE</th> <th>SHEET NO.</th> </tr> </thead> <tbody> <tr> <td>MEZZ. FLOOR SPRINKLER PLANS AND DETAILS</td> <td>FP 1 OF 1</td> </tr> </tbody> </table> | SHEET TITLE | SHEET NO. | MEZZ. FLOOR SPRINKLER PLANS AND DETAILS | FP 1 OF 1 |
|--|-------------|-------------|--------|------|--|--|--|--|---|-----------------------------|----------|------|-------|---------------------------------|--------|--------|--------|------------------------------------|------|-----|---|-------------------------------|------|-------|-----|------------------------|--|--|-----|--|--|--|-------------|------|------------|--|-----------|------|-------------|--|-------|------|--------------|-----------|---|-------------|-----------|---|-----------|
| REV.   | DESCRIPTION | BY          | DATE   |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
|  |             |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| SPRINKLER SCHEDULE & LEGEND  | QUANTITY    | UNIT        | TOTAL  |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| EXISTING SSU VICTALIC MODEL V27  | 17,729      | SPRINK      | 17,729 |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| EXISTING SSP OR VICTALIC MODEL V27   | 1/2"        | CHR         | 1      |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| NEW SSU OR VICTALIC MODEL V27  | 1/2"        | BRASS       | 185    |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| TOTAL COUNT THIS SHEET   |             |             | 185    |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| PROJECT NO.  | DATE        |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| WDC - 0418   |             |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| DRAWN BY:  | DATE        |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| MARK WRIGHT  |             |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| SCALE  | DATE        |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| 1/8" = 1'-0"   | JUN 15 04   |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| SHEET TITLE  | SHEET NO.   |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |
| MEZZ. FLOOR SPRINKLER PLANS AND DETAILS  | FP 1 OF 1   |             |        |      |  |  |  |  |   |                             |          |      |       |                                 |        |        |        |                                    |      |     |   |                               |      |       |     |                        |  |  |     |  |  |  |             |      |            |  |           |      |             |  |       |      |              |           |   |             |           |   |           |



*NOTES  
SEE BUILDING INSPECTOR  
ON SITE FOR EMERGENCY  
LAYOUT AND EXIT SIGN  
PACKING*

*IF REBAR IS ENCOUNTERED  
WHEN DRILLING ANCHOR HOLES  
SEE ATTACHED  
DRAWING FOR  
REBAR ANCHORS*

*NO SHELVES  
PERMITTED IN  
MEZZANINE SUPPORT  
STRUCTURE*

**INSTALLATION SIGN-OFF**

INSTALLER: THIS INSTALLATION IS COMPLETE AS PER THE SPECIFICATIONS ON THIS DRAWING.  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

INSPECTOR: THIS INSTALLATION HAS BEEN INSTALLED AS PER THE SPECIFICATIONS ON THIS DRAWING.  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

CUSTOMER: I/WE ARE SATISFIED WITH THE INSTALLATION AS PER OUR PURCHASE ORDER.  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

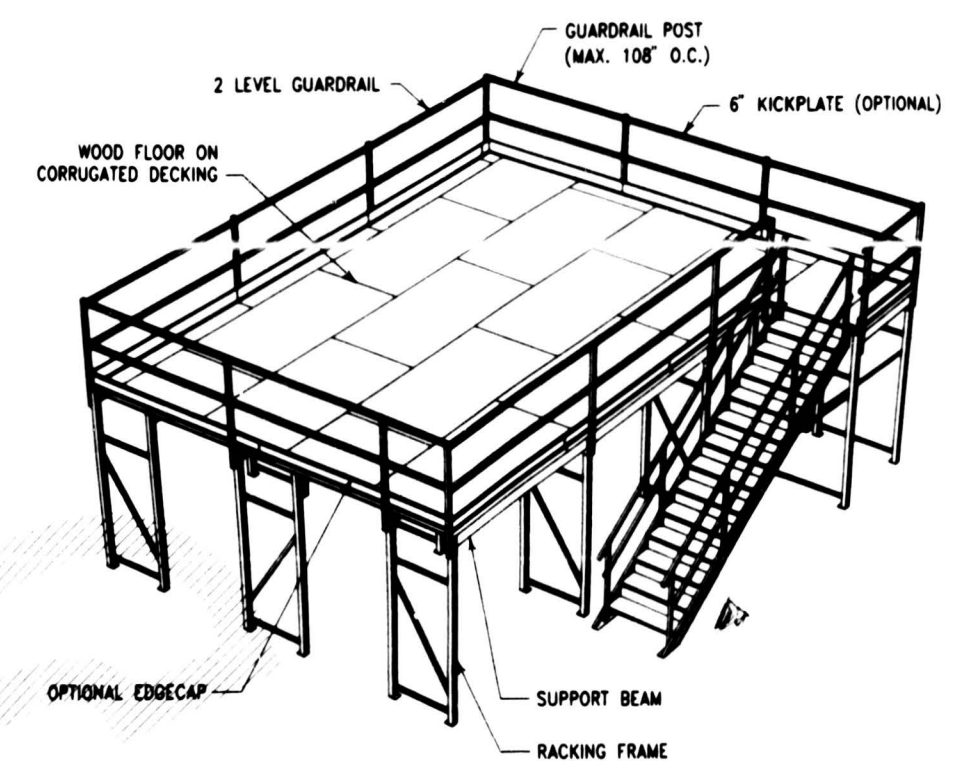
**\* WARNING \***

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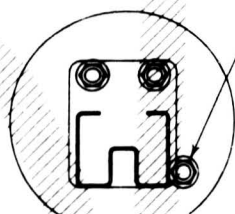
THIS DRAWING IS TO PROVIDE INSTRUCTION FOR INSTALLATION OF PRODUCTS PROVIDED BY ARPAC. ANY AND ALL USE OF THIS DRAWING BY OTHERS IS AT THEIR SOLE RISK.

**GENERAL NOTES**

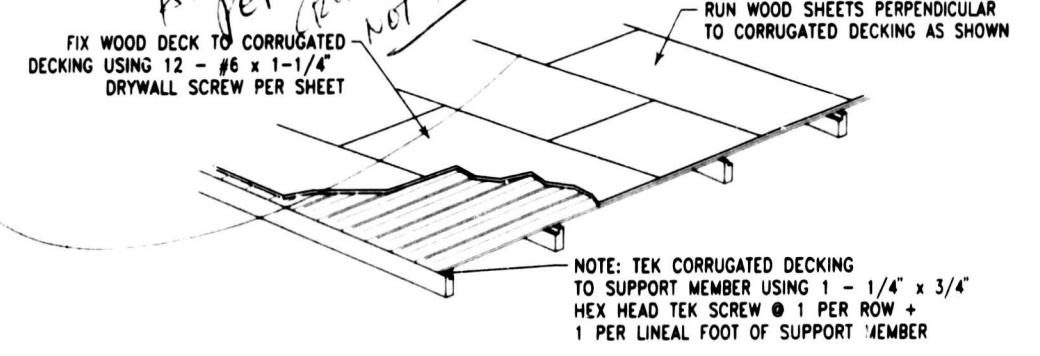
- 1) CONFIRM ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF THE WORK.
- 2) REPORT DISCREPANCIES TO THE INSTALLATION SUPERVISOR BEFORE PROCEEDING. THE ENGINEER-OF-RECORD AND THE CUSTOMER MUST APPROVE CHANGES.
- 3) RACK SHOULD BE INSTALLED PLUMB AND SQUARE. SHIMMING MAY BE REQUIRED AS MOST FLOORS ARE NOT PERFECTLY LEVEL. PERMISSIBLE TOLERANCE FROM PLUMB IS 1/2" FOR EVERY 10'-0" OF FRAME ELEVATION.
- 4) RACK COMPONENTS MUST BE A MINIMUM OF 6" FROM WALLS, COLUMNS, MACHINERY, ETC. IN BOTH THE DOWN-AISLE AND CROSS-AISLE DIRECTIONS, UNLESS NOTED OTHERWISE.
- 5) INSTALL 1 LOCKING PIN PER BEAM BRACKET, UNLESS NOTED OTHERWISE.
- 6) INSTALL ROW SPACERS BETWEEN BACK-TO-BACK FRAMES AT INTERVALS NOT TO EXCEED 8'-0". IF FRAMES ARE ANCHORED, FIRST ELEVATION MAY BE UP TO 8'-0" FROM FLOOR LEVEL, OTHERWISE < 2'-0".
- 7) ANCHORS MUST BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MINIMUM EMBEDMENT IS ANCHOR LENGTH MINUS 1 1/2", UNLESS NOTED OTHERWISE.
- 8) COMPLIANCE WITH BUILDING AND APPLICABLE FIRE CODES, BY-LAWS AND REQUIRED PERMITS, IF ANY, ARE THE OWNER'S RESPONSIBILITY.
- 9) SEISMIC ANALYSIS & DESIGN OF NEW AND/OR USED IN "AS-NEW" (NO RUST, DAMAGE, ETC.) CONDITION MULTI-LEVEL RACK AND/OR SHELVING MEETS THE SEISMIC RESISTANCE REQUIREMENT OF THE CBC 1998 PART 4: STRUCTURAL DESIGN.
- 10) SEISMIC DATA USED FOR THIS ANALYSIS: v=0.2, Z<sub>0</sub>=2v=4
- 11) DAMAGED RACK AND/OR SHELVING MUST BE UNLOADED IMMEDIATELY AND NOT RETURNED TO SERVICE UNTIL THE DAMAGED COMPONENTS ARE REPLACED OR REPAIRS ARE COMPLETED. ALL SUCH REPAIRS SHOULD BE COMPLETED BY A COMPETENT PERSON.



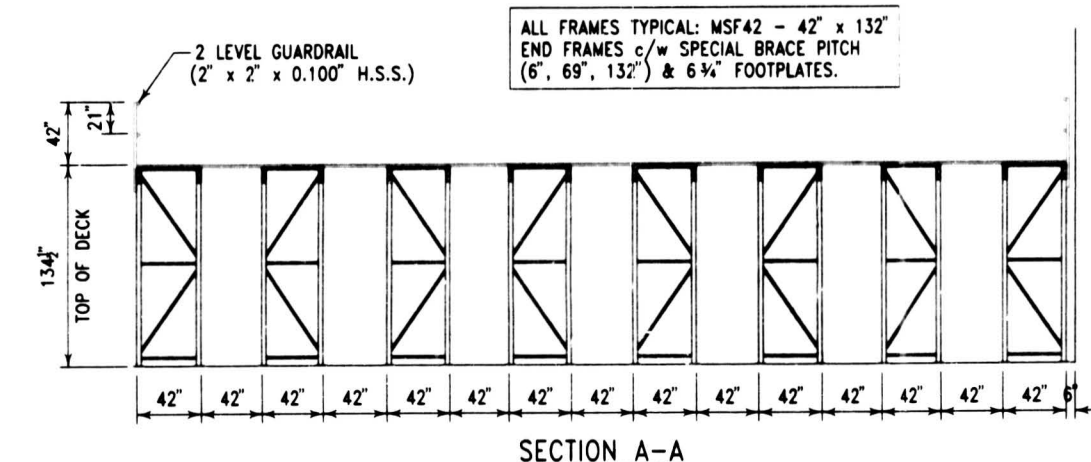
TYPICAL VIEW OF RACK SUPPORTED PLATFORM



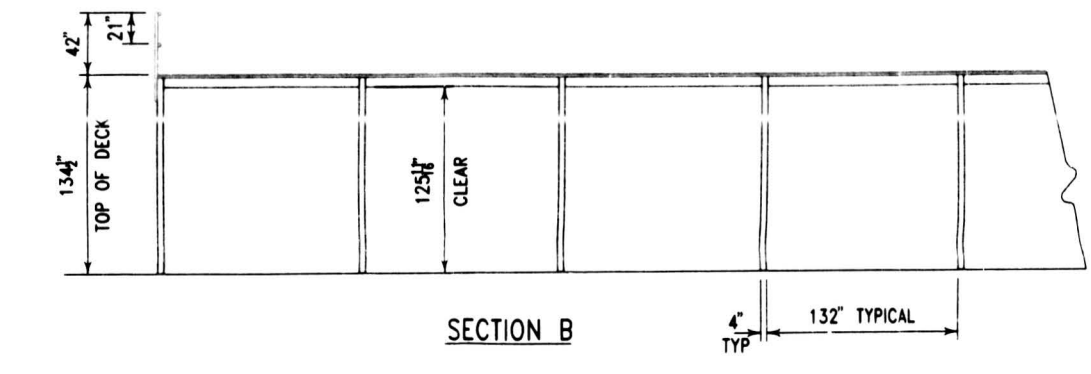
ANCHORING DETAIL



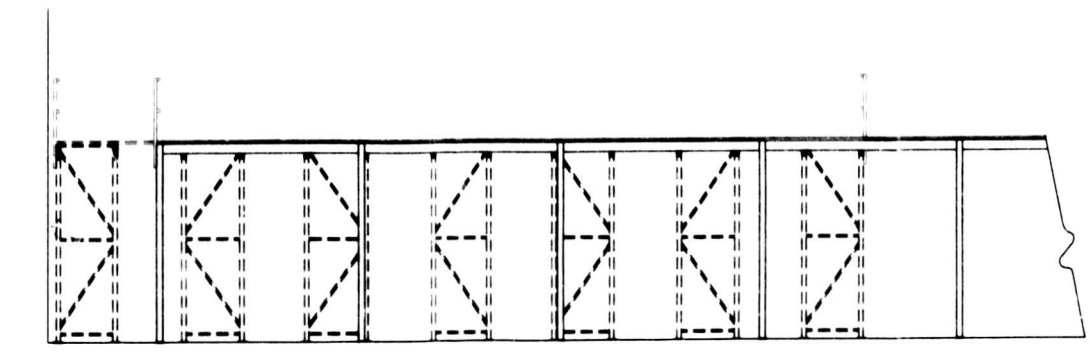
DECKING DETAIL



SECTION A-A



SECTION B



SECTION C  
-RACK SHOWN AS DASHED LINES INDICATES RACK IN BACKGROUND.

*NOTE:  
ALL STAIRS TO  
BE CONSTRUCTED  
AS PER EXIT SIGN  
PER ELEVATOR  
RAMP, ROW EAKE BACK  
NOT HANDRAILS*



*OFFICE COPY*

*OFFICE COPY*

RECEIVED  
APR 21 2004  
CITY OF VANCOUVER  
PLANNING AND DEVELOPMENT DEPT.

NO. 02/06  
01/06

REVISION

DATE APRIL 21/04  
MAR 16

DRAWING NO.: 03-192  
SCALE: 1/4" = 1'-0"

ISSUE DATE: 1/2  
REVISION: 02

DATE: Sept. 12/03  
SHEET: 1/2  
DRAWN BY: MK

APPROVED BY:

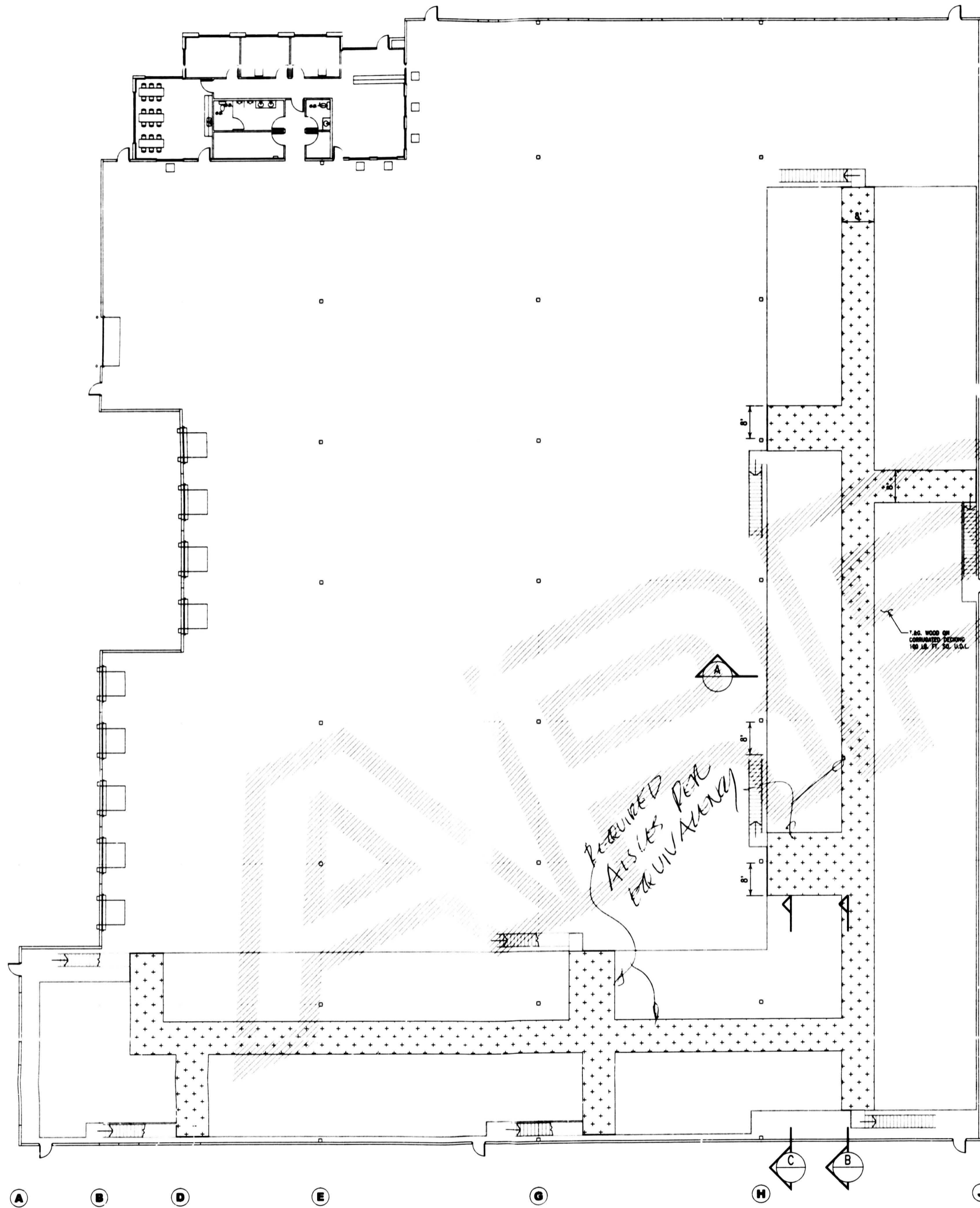
**SANDY'S FURNITURE**  
1450 BRIGANTINE DRIVE, COQUITLAM, BC

**ARPAC**  
ARPAC STORAGE SYSTEMS CORPORATION

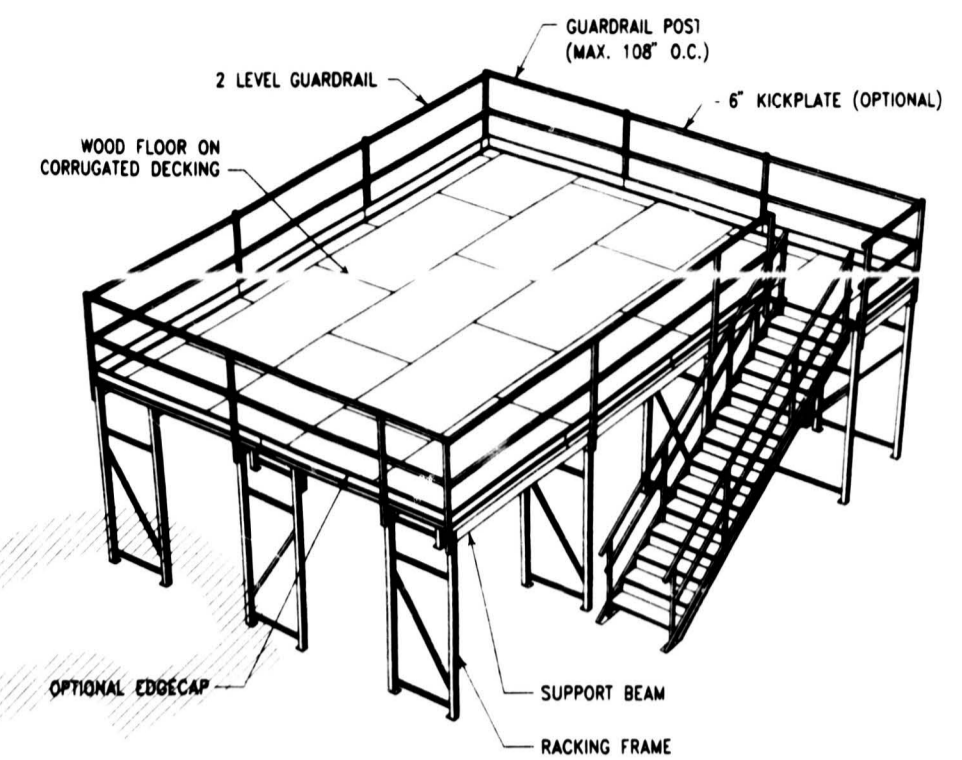


A 20' B 8' C 12' D 35' E 21'-6" F 33'-6" G 55' H 55' J

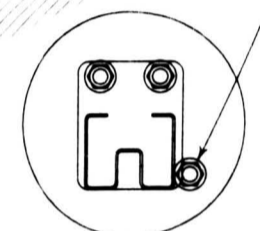
1  
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14



PLAN OF RAISED STORAGE PLATFORM



TYPICAL VIEW OF RACK SUPPORTED PLATFORM



IF REBAR IS ENCOUNTERED WHEN DRILLING ANCHOR HOLES:  
 1) USE ALTERNATE HOLE (IF AVAILABLE ON SAME SIDE OF POST) OR  
 2) INSTALL A SHORT ANCHOR IN THE HOLE WHERE REBAR OCCURS AND INSTALL A STANDARD ANCHOR ON SAME SIDE OF FOOTPLATE, WELDING THE NUT/WASHER TO THE FOOTPLATE.

ANCHORING DETAIL

GENERAL NOTES

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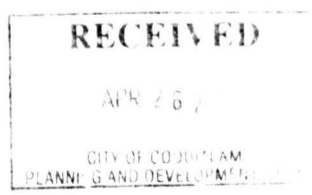
ATTN: to be 6/16/04

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| REVISION | DATE | DATE        |
|----------|------|-------------|
| 0 (GG)   |      | APRIL 21/04 |
| 0 (MK)   |      | MAR.16      |

DRAWING NO.: 03-192  
 SCALE: 1/8" = 1'-0"  
 SHEET: 2/2  
 DRAWN BY: GG  
 APP'D BY:

SANDY'S FURNITURE  
 1450 BRIGANTINE DRIVE, COQUITLAM, BC



