

**PROVINCE OF NOVA SCOTIA
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE RENEWAL**

DTIR Document DC350

APPENDICES

DESIGN REQUIREMENTS

Appendix A

**Performance Criteria
for
Design Projects**

2010 EDITION

Printed September 21, 2010

DC 350, Appendix A is not intended to be a complete architectural, mechanical or electrical specification for all projects. Such a complete specification must be written for each project by the Project Consultant.

This section, in conjunction with DC 350, Part 1 and Part 2 and other Appendices, and client department design requirements, specifies, in outline form, the minimum acceptable standards for design services and building components.

1 PROFESSIONAL CONSULTANTS

- 1.1 All design services shall be provided by architects, mechanical engineers, electrical engineers, structural engineers, civil engineers, and landscape architects who are registered with the respective professional association within the Province of Nova Scotia. Professional Consultants shall provide complete consulting services during all stages of the projects as outlined by their professional associations. The Prime Consultant; or in the case of a Design Build Project, the Contractor must confirm/identify their consulting team prior to the signing of the contract. Any change to the consulting team must be accepted and approved by the Department of Transportation and Infrastructure Renewal.

2 DESIGN REVIEW PROCESS

- 2.1 At the end of the Schematic Design, Design Development and Construction Documents stages of the project the Consultant; or in the case of a Design Build, the Contractor, shall submit to the DTIR for review and approval, drawings, specifications, and estimates that explain /detail the project. DTIR and our client Department will review the submitted material and shall provide written comments to the Consultant / Contractor within the time identified in Appendix B for the individual Stages of the Work. The Consultant /Contractor, in timely fashion, shall submit a written response to each review comment outlining pending action(s)
- 2.2 The Consultant; or in the case of a Design Build, the Contractor may not move to the next Stage of the project (as outlined in Appendix 'B' attached) until they have received written comments from the Department of Transportation and Infrastructure Renewal and the client Department on the Contractor's previous submission and the Contractor has provided an acceptable written response to Department of Transportation and Infrastructure Renewal and the client Department comments.
- 2.3 It is the province's objective through this process, to build high quality buildings with a 40-50 year life cycle. Although parts of this manual are meant to be/act as a guideline/performance document, if the consultant (after careful consideration and discussion by both parties) is unable to convince client Department and the Department of Transportation and Infrastructure Renewal staff that, what the Consultant is proposing is equal to or exceeds the intent of the design guidelines as interpreted by Department of Transportation and Infrastructure Renewal and the client Department staff, then DTIR and the client Department staff will make the final decision on all interpretations of the design guidelines.

END

**PROVINCE OF NOVA SCOTIA
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE RENEWAL**

DTIR Document DC350

APPENDICES

DESIGN REQUIREMENTS

Appendix B

Design Review Process

2010 EDITION

September 21, 2010

DC 350, Appendix B is not intended to be a complete architectural, mechanical or electrical specification for all projects. Such a complete specification must be written for each project by the Project Consultant.

This section, in conjunction with DC 350, Part 1 and Client Department design requirements and other Appendices, specifies, in outline form, the minimum acceptable standards for design services and building components.

**GOVERNMENT OF NOVA SCOTIA
DESIGN REVIEW PROCESS**

- 1 All information (drawings, specifications, reports) to be submitted in accordance with standard practice procedures as described in the Professional Handbooks of Practice for Architects and Engineers. All work is to be prepared in conjunction with the Provincial Acts and Regulations for both Nova Scotia Professional Associations.
- 2 Document submissions, for review and approval, are to be provided to the Department of Transportation and Infrastructure Renewal and the client Department in accordance with the following stages and submission guidelines. Written responses to these submissions will be provided in a timely manner necessary to reasonably allow the work to continue.
- 3 Written responses to the province's comments on a submission from the Consultant; or in the case of a Design Build, the Contractor, must be provided by the Consultant; or in the case of a Design Build, the contractor prior to starting the next stage. Government staff will make every effort to achieve dates agreed to, but may require additional time depending on work load and number of submissions made at one time.
- 4 Prior to the start of construction, the Consultant; or in the case of a Design Build the Contractor and the Contractor's consulting team must provide the province with a written certification that all standards in the design guidelines of the bid documents have been met. The province also reserves the right to inspect all work, without notice, to ensure compliance with the DC350 - Design Requirements Manual and good building practice. Inspections will be carried out by DTIR staff or consultants acting as their agents. The Consultant or in the case of a Design Build project, the Contractor shall also provide copies of all inspection reports, including but not limited to; **Consultant's or Contractor's** Consultant site review reports, geotechnical, testing, balancing, and underground services.
- 5 In addition to other meeting requirements, the Consultant or the Contractor's Consultant shall attend a minimum of 3 meetings with DTIR and the client Department - at a mutually convenient location: as well as 3 meetings, 3.5 hours each, in the subject community, for the purposes of consultation with users groups regarding detailed design.
- 6 Following Sign Off by Department of Transportation and the client Department in stages 1 through 5, Design teams shall not make major changes to approved systems and layouts, beyond the changes required to improve and complete those systems without written approval from the Minister's Representative.

STAGE 1 - SCHEMATIC DESIGN STAGE

- 1 The Schematic Design Documents shall consist of the documents required to illustrate the scale and character of the Project and how the parts of the Project functionally relate to each other, in sufficient detail to fully interpret the program.
- 2 Purpose: to demonstrate compliance with approved Program
 - 2.1 Review by DTIR , and our client Department.
 - 2.2 Sign Off by DTIR, and our client Department and the, and the Contractor.
- 3 Information Required:
 - 3.1 Design Concept Brief
 - 3.2 Space Program Comparison Report
 - 3.3 Architectural Schematic Floor Plans
 - 3.4 Architectural Schematic Building Elevations (including major elements)
 - 3.5 Architectural Schematic Building Sections (minimum scale 1:200)
 - 3.6 Schematic Site Plan
 - 3.7 Class 'D' estimate
 - 3.8 Outline specification including architectural, mechanical, electrical and structural
 - 3.9 Building Code Analysis Report
 - 3.10 LEED Target Summary Report including overview of sustainable initiatives.
 - 3.11 All documentation required by the LEED Commissioning Agent.
- 4 Submission
 - 4.1 Submit eight (8) copies of Schematic Design Documents
- 5 Timing
 - 5.1 To be submitted within 6 weeks of receiving award to proceed from the DTIR
 - 5.2 The Province will provide comments within 15 working days of Design Development submission

STAGE 2 - DESIGN DEVELOPMENT STAGE

- 1 The Design Development Documents shall consist of drawings, specifications, reports and other documents appropriate to the size of the Project, required to describe and represent the size and character of the entire Project as to the architectural, structural, mechanical, electrical and landscape systems, including materials and other elements as are appropriate.

- 2 Purpose:
 - 2.1 To demonstrate compliance with approved Program
 - 2.1.1 Review by DTIR, the our client Department
 - 2.1.2 Sign Off by DTIR, the client Department , and the Design -Build Contractor if applicable.
- 3 Information Required:
 - 3.1 Design Development Brief
 - 3.2 Space Program Comparison Report
 - 3.3 Civil Drawings: Site Plan, Grading Plan & Servicing
 - 3.4 Landscape Drawings: Site Layout
 - 3.5 Architectural Drawings: Floor plans, Building Elevations, Building Sections and Building Envelope Details
 - 3.6 Structural: Foundation, Floor & Roof Framing and Details
 - 3.7 Mechanical Drawings: HVAC, Plumbing, and Piping Floor Plans
 - 3.8 Electrical Drawings: Site Plan, Power Plans, Communications Plans, Lighting Plans and Details
 - 3.9 Class 'C' estimate
 - 3.10 Outline specification including architectural, structural, civil, landscape, mechanical, electrical and structural
 - 3.11 Building Code Analysis Report
 - 3.12 LEED Target Summary Report including overview of sustainable initiatives.
 - 3.13 All documentation required by the LEED Commissioning Agent.
- 4 Submission
 - 4.1 Submit eight(8) copies of Design Development Documents
- 5 Timing:
 - 5.1 Department of Education and Department of Transportation and Infrastructure Renewal shall provide comments within 15 working days.

STAGE 3 - CONSTRUCTION DOCUMENT STAGE

- 1 Construction Documents shall consist of drawings and specifications setting forth in detail the requirements for the construction of the Project.
- 2 Purpose:
 - 2.1 To demonstrate compliance with approved design and design guidelines
 - 2.1.1 Review by DTIR, the client Department .

- 2.1.2 Sign Off by DTIR, the client Department , and Design Build Contractor if applicable.
- 3 Information Required at 50% and 100%:
- 3.1 All Civil Work
 - 3.2 Landscape Work
 - 3.3 All Structural Work
 - 3.4 All Architectural Work
 - 3.5 All Mechanical Work
 - 3.6 All Electrical Work
 - 3.7 All Specifications including LEED Commissioning Plan
- 4 Submission:
- 4.1 Submit 10 full size sets of above information.
 - 4.2 Submit 5 drawing sets at half size.
- 5 Timing:
- 5.1 To be submitted by Contractor in two submsions, at 50% and 100% completion as identified above, at intervals agreed to by the Minister’s Representative but not to exceed 6 weeks of Stage 2 approval by Department of Transportation and Infrastructure Renewal.
 - 5.2 The province shall provide written comments within 15 working days.

STAGE 4 - FUNCTIONAL PERFORMANCE TESTING STAGE

- 1 Purpose
- 1.1 Review by DTIR, client Department .
 - 1.2 Sign Off by DTIR, the client Department , and the Design Build Contractor, if applicable.
- 2 Information Required:
- 2.1 Written plan and appropriate performance requirements
 - 2.2 For LEED registered projects provide documentation required by Owner’s LEED Commissioning Agent.
- 3 Timing
- 3.1 To be submitted by Contractor 3 months prior to Substantial Performance.
 - 3.2 DTIR and Client Department to provide written comments within 15 working days of receiving Stage 4 submission.

STAGE 5 - OCCUPANCY

- 1 Components:
 - 1.1 Substantial Completion
 - 1.2 Functional Performance Testing Report
 - 1.3 As-builts and Warranty
 - 1.4 Final Completion Date
 - 1.5 Operation and Maintenance Manuals

- 2 Purpose:
 - 2.1 Review by DTIR, the client Department .
 - 2.2 Sign Off by DTIR, the client Department, and the Design Build Contractor, if applicable.

- 3 Information Required:
 - 3.1 For LEED registered projects provide documentation required by Owner's LEED Commissioning Agent
 - 3.2 6 copies of all above noted documentation, reports, permits and any other required documentation
 - 3.3 3 copies of Operating and Maintenance Manuals.
 - 3.4 3 hard copies of As-built drawings
 - 3.5 3 copies of As-built drawings on 3 CD's.

**PROVINCE OF NOVA SCOTIA
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE RENEWAL**

DTIR Document DC350

APPENDICES

**EDUCATIONAL FACILITIES
DESIGN REQUIREMENTS**

Appendix C

Drawings and Sketch Details

2010 EDITION

September 21, 2010

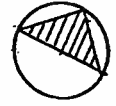
DC 350, Appendix B is not intended to be a complete architectural, mechanical or electrical specification for a school project. Such a complete specification must be written for each project by the Project Consultant.

This section, in conjunction with DC 350, Part 1 and Part 2 and other Appendices, specifies, in outline form, the minimum acceptable standards for school components.

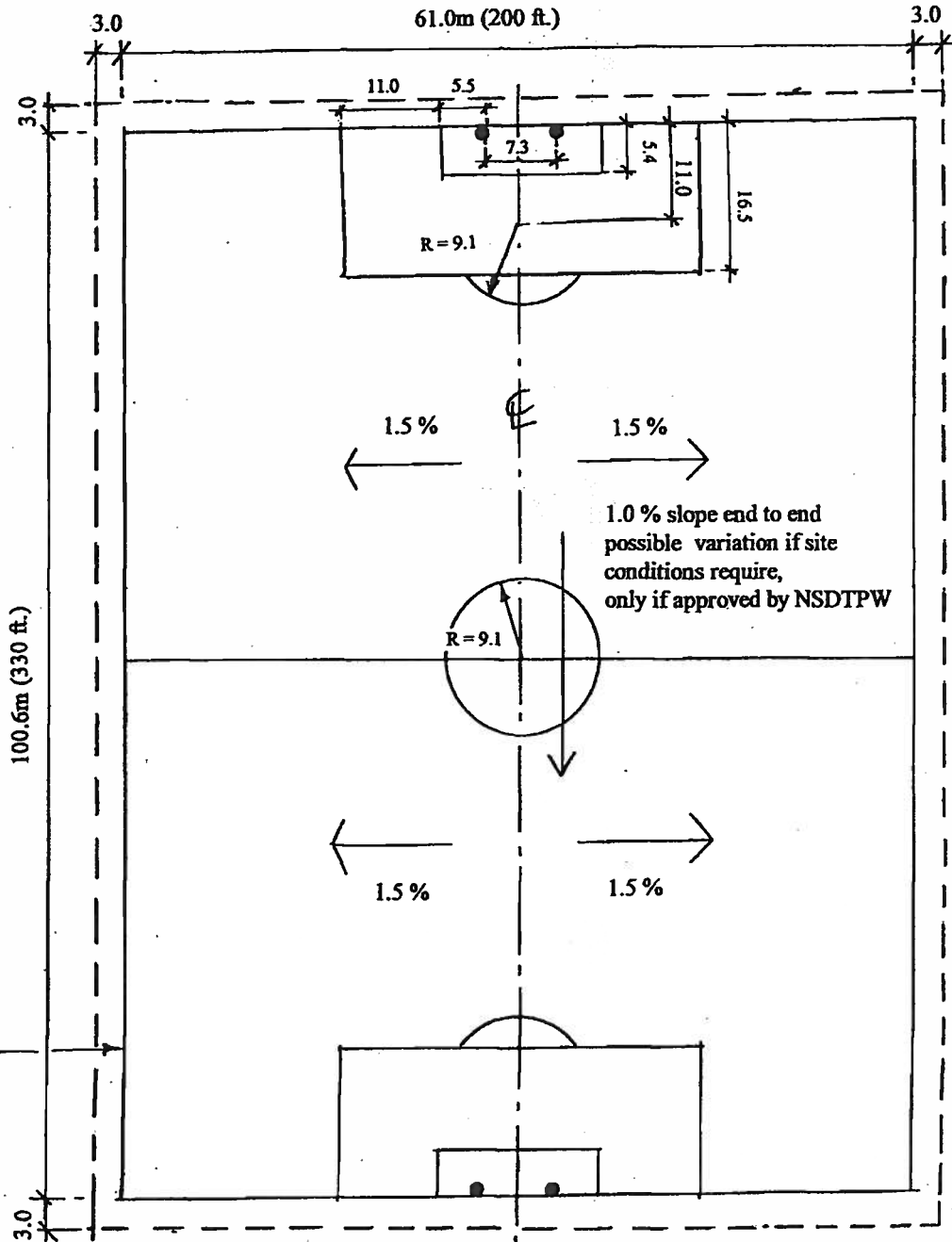
Notes:

1. Centre line shall be level unless site conditions require variation as approved by NSDTPW.
2. Provide space for possible future spectator seating.
3. There shall be no standing water within 15 m of the perimeter of the field.
4. Seed or sod turf under ideal conditions. Maintain until field is approved for use by NSDTPW.
5. Field markings and goals shall not be provided until field is ready for use as approved by NSDTPW.
6. All measurements are in metric unless noted otherwise.

Field orientation to be NNW SSE unless approved otherwise by NSDTPW



NORTH



3.0 m wide run-off zone

provide end fencing where required (confirm with NSDTPW)

Reference: Soccer Nova Scotia



project:
Design Requirements Manual

title:
Soccer Field Layout and Grading

date:
06-10-10

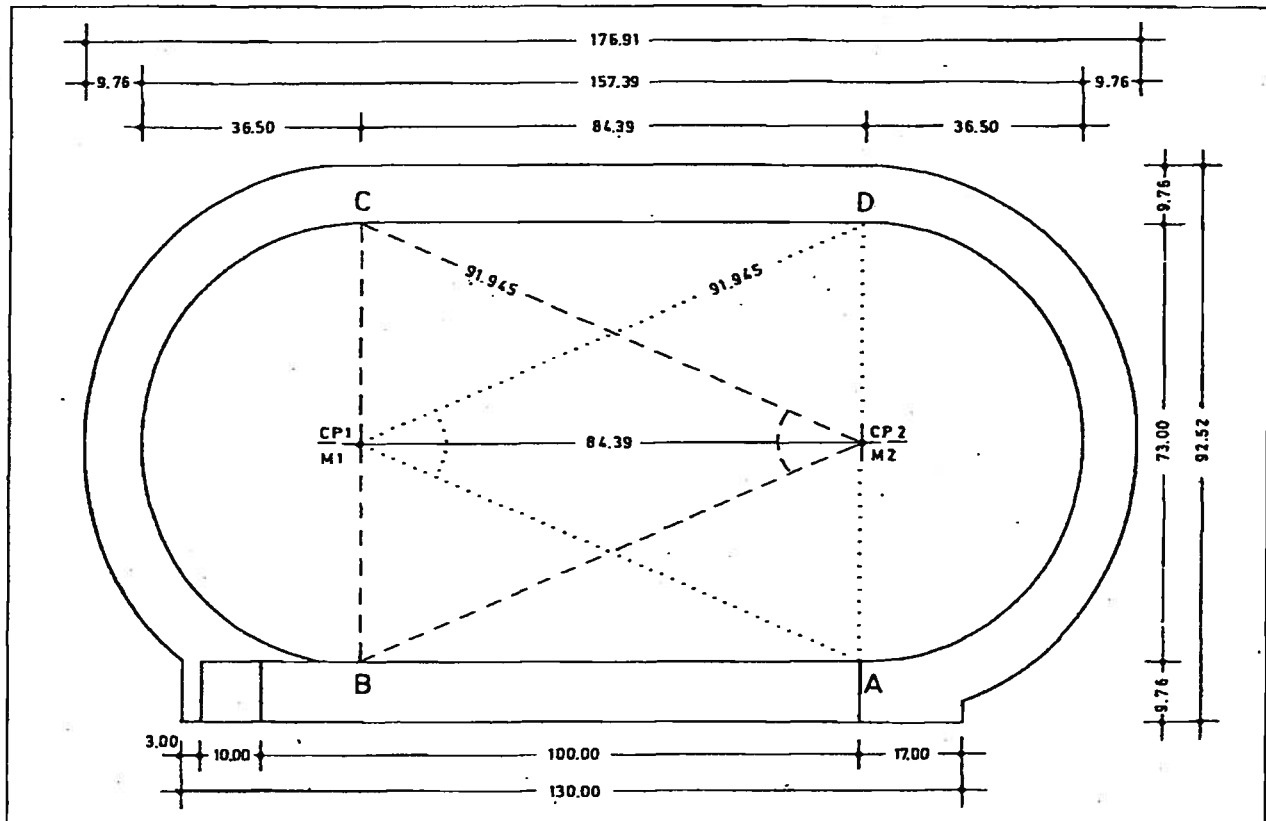
scale:
NTS

drawn / checked:
LG

detail #:
ASK-1

The 400m Standard Track

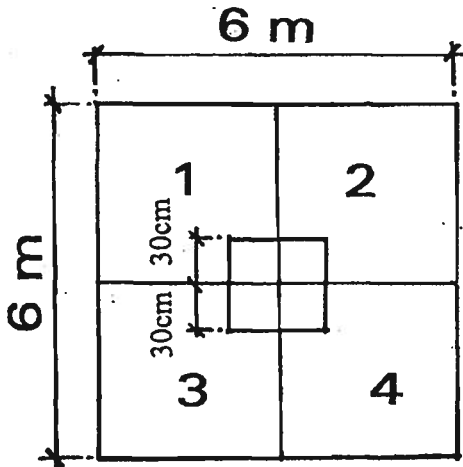
The 400m Standard Track has the advantages of a simple construction, straight and curved sections of almost equal length and uniform bends which are most suitable to the running rhythm of athletes. Furthermore, the area inside the track is large enough to accommodate all throwing events and also a standard football pitch (68m x 105m).



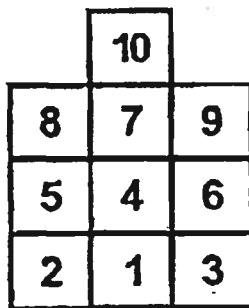
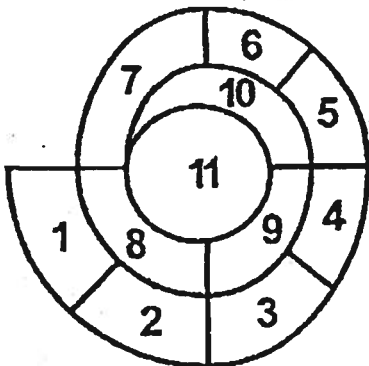
The 400m Standard Track comprises 2 semi-circles, each with a radius of 36.50m, which are joined by two straights, each 84.39m in length (Fig 1.2.3a). This diagram indicates the inside edge of the track which must have a kerb with a height of 0.05m to 0.065m and a width of 0.05m to 0.25m. The inner edge of the track is 398.12m in length ($36.5m \times 2 \times \pi + 84.39m \times 2$) where $\pi = 3.1416$. This length for the inner edge gives a length of 400.00m ($36.8m \times 2 \times \pi + 84.39m \times 2$) for the theoretical line of running (measurement line) at a distance of 0.30m from the kerb. The inside lane (lane 1) will, therefore, have a length of 400.00m along its theoretical line of running.

Reference: International Amateur Athletic Federation
Track and Field Facilities Manual

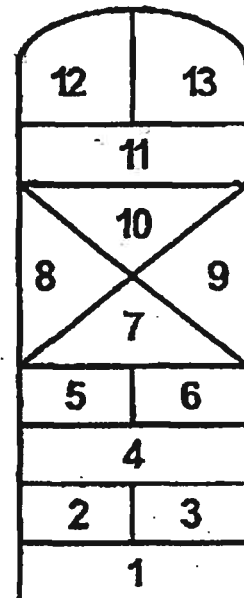
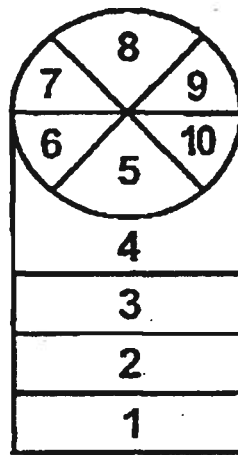
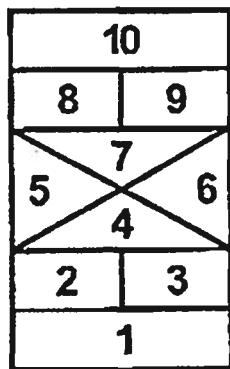
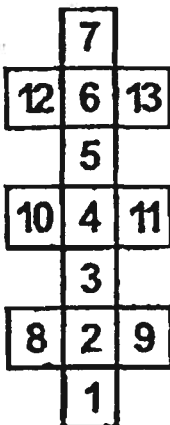
<p>NOVA SCOTIA Transportation and Public Works Building Design Group</p>	project:	date:	detail #: ASK-2
	Design Requirements Manual	06-10-10	
	title:	scale:	
	Layout for 400 Metre Track	NTS	
		drawn/checked:	
		lg/gr	



Minimum Size Requirement
 All squares, x's, semicircles, etc. should be made large enough to accommodate a child's foot comfortably (30-40cm).



1	2	3	+	x
4	5	6	0	÷
7	8	9	-	=
ON		OFF		
PLAYGROUND COMPUTER				



NOVA SCOTIA
 Transportation and Public Works
 Building Design Group

project:
 Design Requirements Manual

title:
 Pavement Markings for
 Childrens' Games

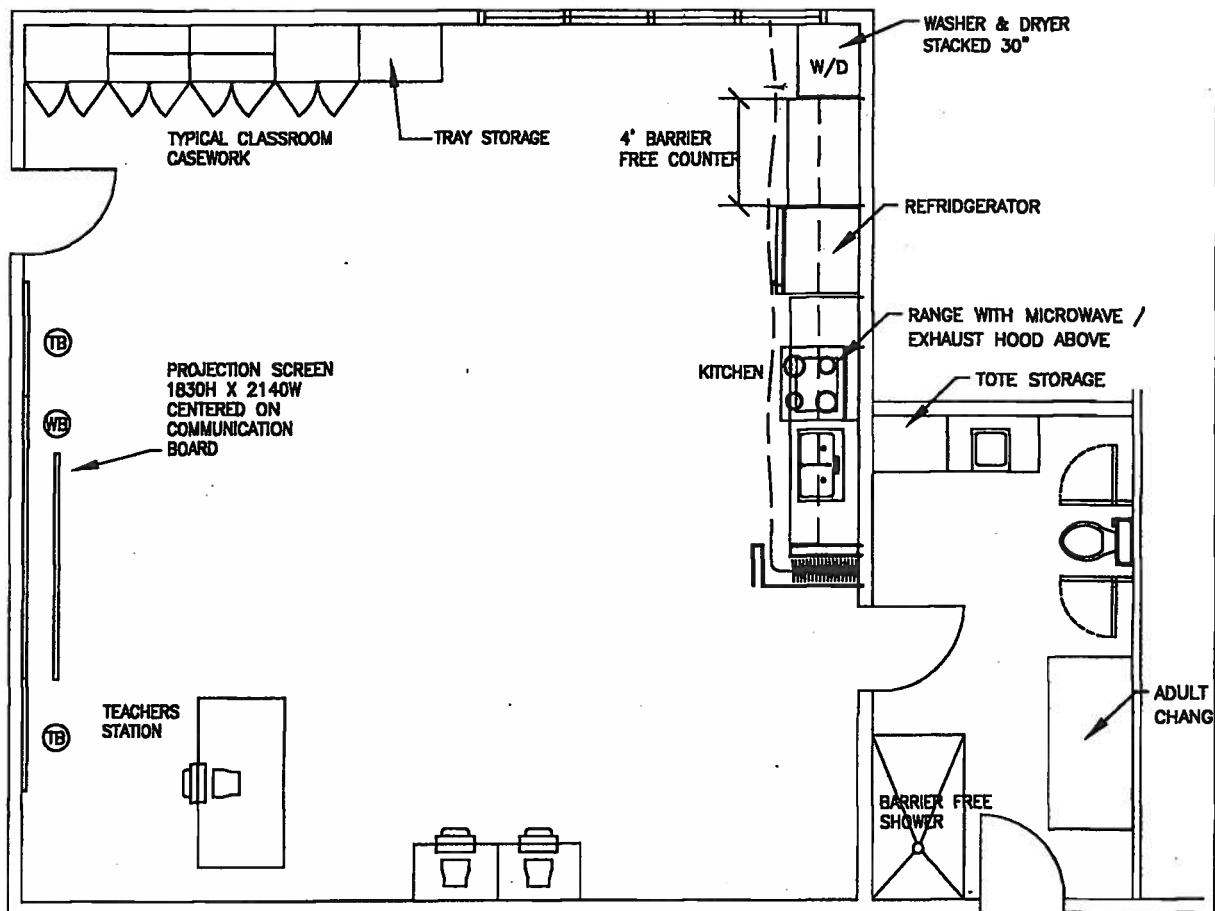
date:
 06-10-10

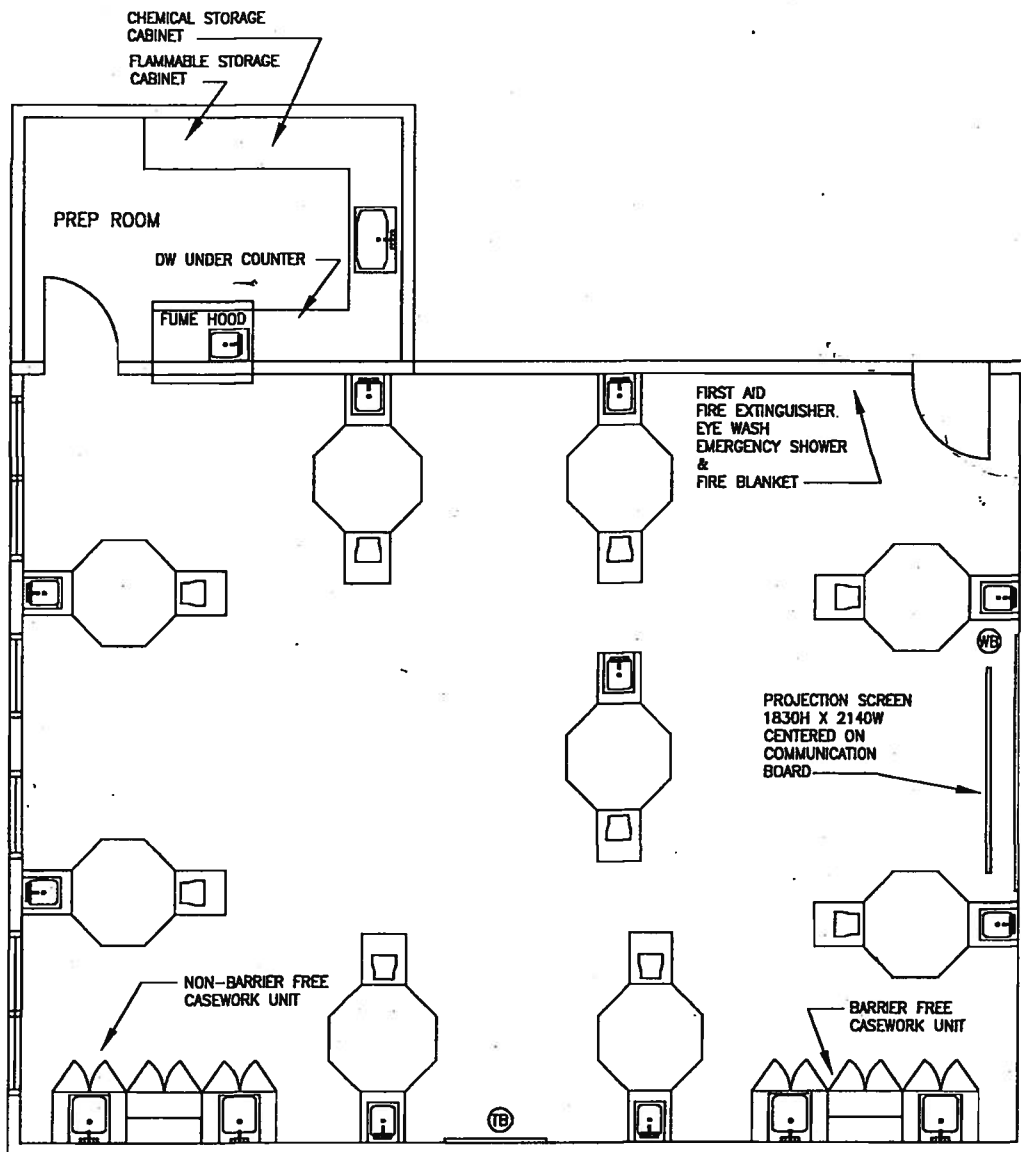
scale:
 NTS

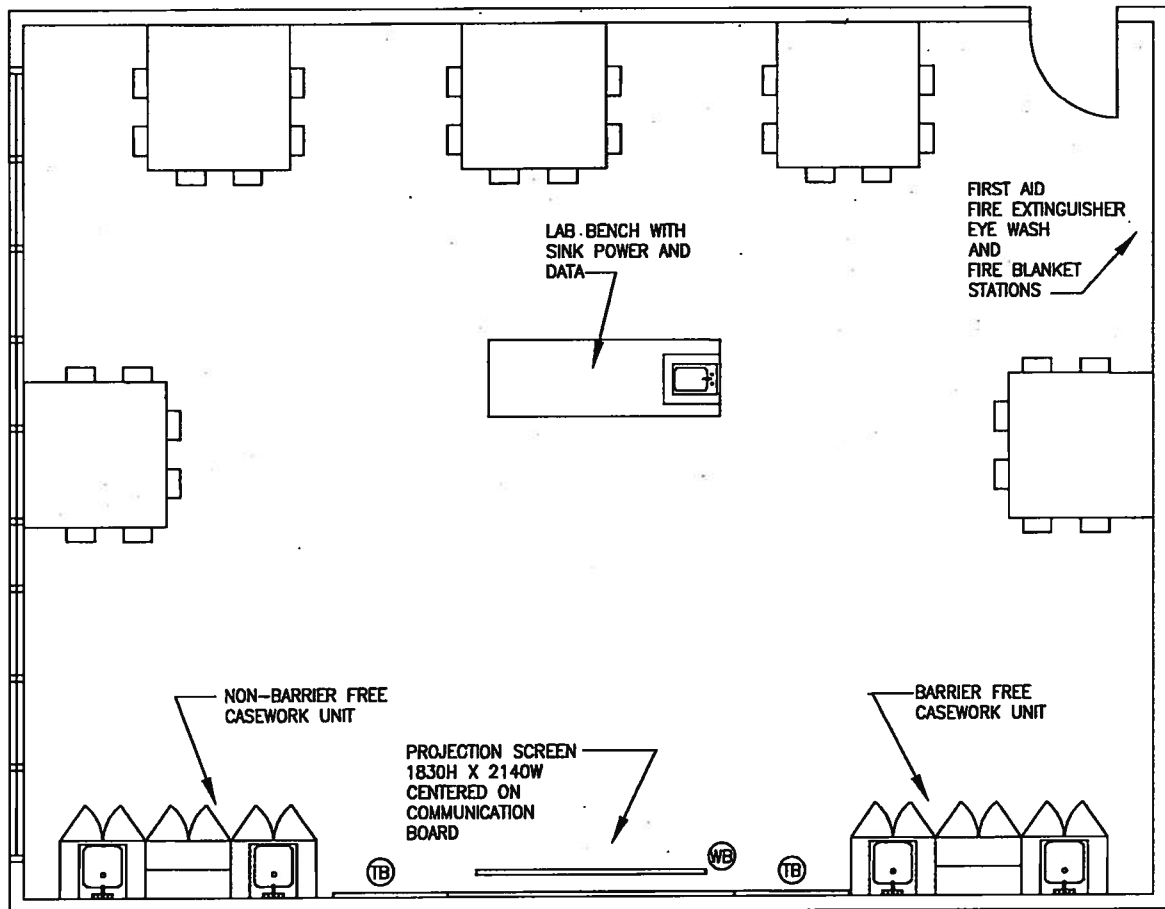
drawn/checked:
 lg/gr

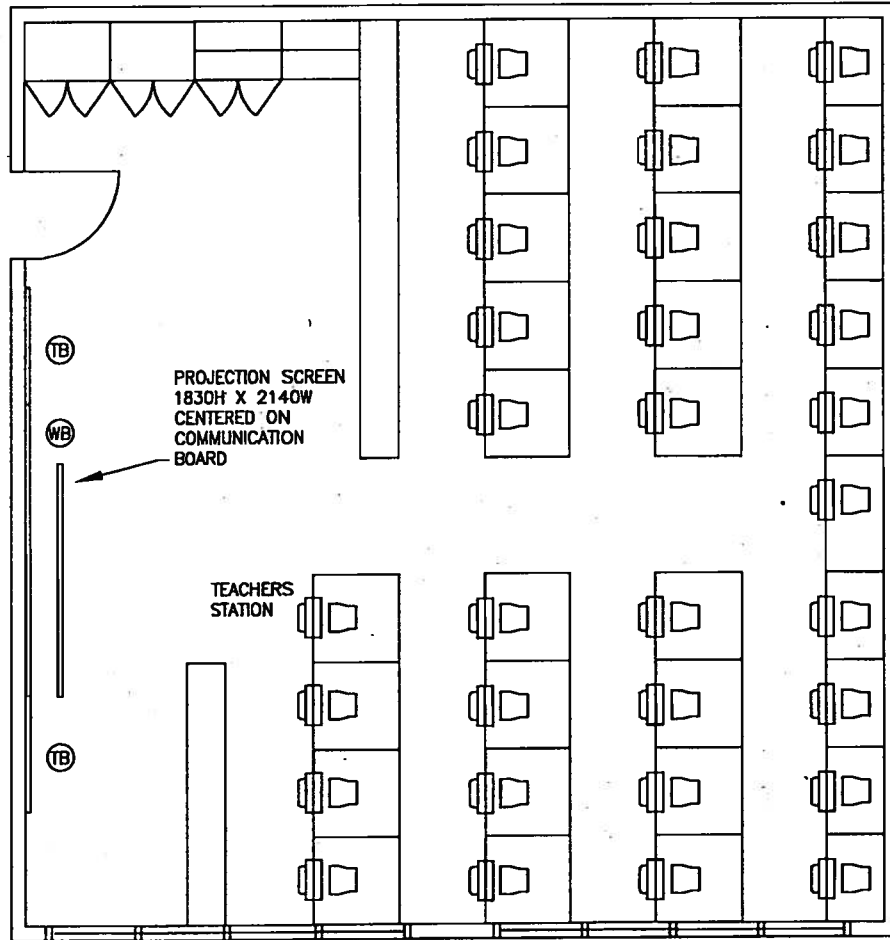
detail #:

ASK-3

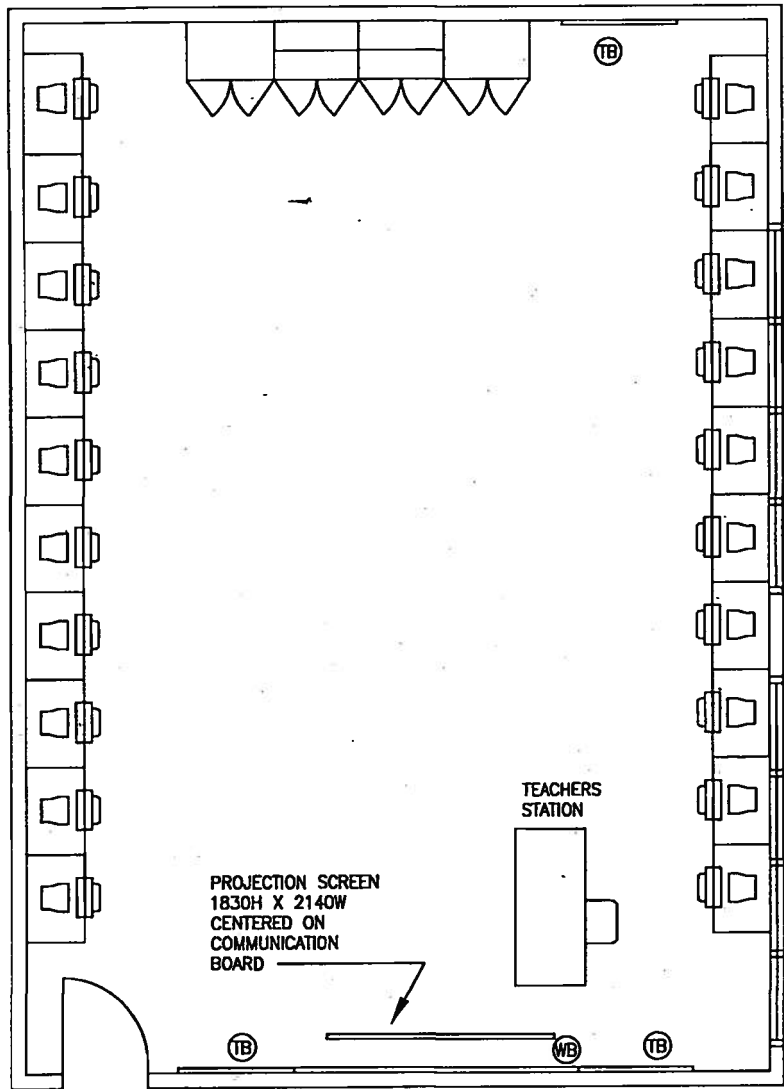








PROJECT	DC350	PROJECT NO.	W01-02-01-02	DWG. NO.
	DESIGN REQUIREMENTS MANUAL 2010 EDITION	SCALE	NTS	
DRAWING	INFORMATION TECHNOLOGY	DATE:	SEPT 15 2010	ASK-8

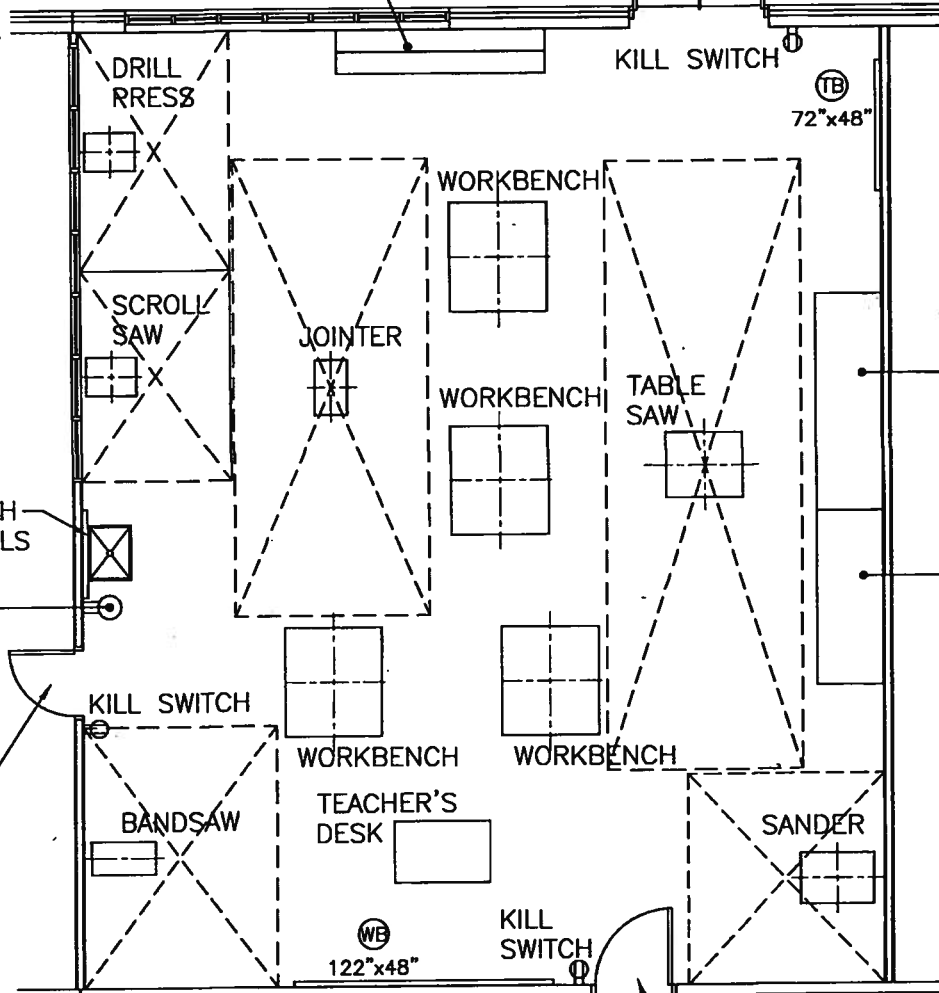


10' LONG x 24" DEEP COUNTER
AREA C/W BUTCHER BLOCK TOP,
18" DEEP STORAGE CABINET BELOW
WITH ADJUSTABLE SHELVING.

OUTSIDE
ACCESS

KILL SWITCH

72"x48"



TUB SINK WITH
FOOT CONTROLS

EYE-WASH
STATION

10' RACK
STORAGE
FLOOR TO
CEILING

8' CABINET
STORAGE
FLOOR TO
CEILING

ACCESS TO
ADJACENT
TECHNOLOGY
EDUCATION
CLASSROOM

KILL SWITCH

WORKBENCH

WORKBENCH

BANDSAW

TEACHER'S
DESK

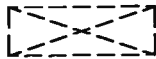
SANDER

122"x48"

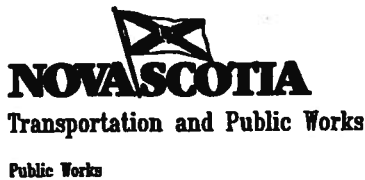
KILL
SWITCH

CORRIDOR

OVERSIZED
DOOR



SAFETY ZONE AS REQUIRED



PROJECT DC350
DESIGN REQUIREMENTS MANUAL
2007 EDITION

DRAWING TECHNOLOGY PRODUCTION AREA

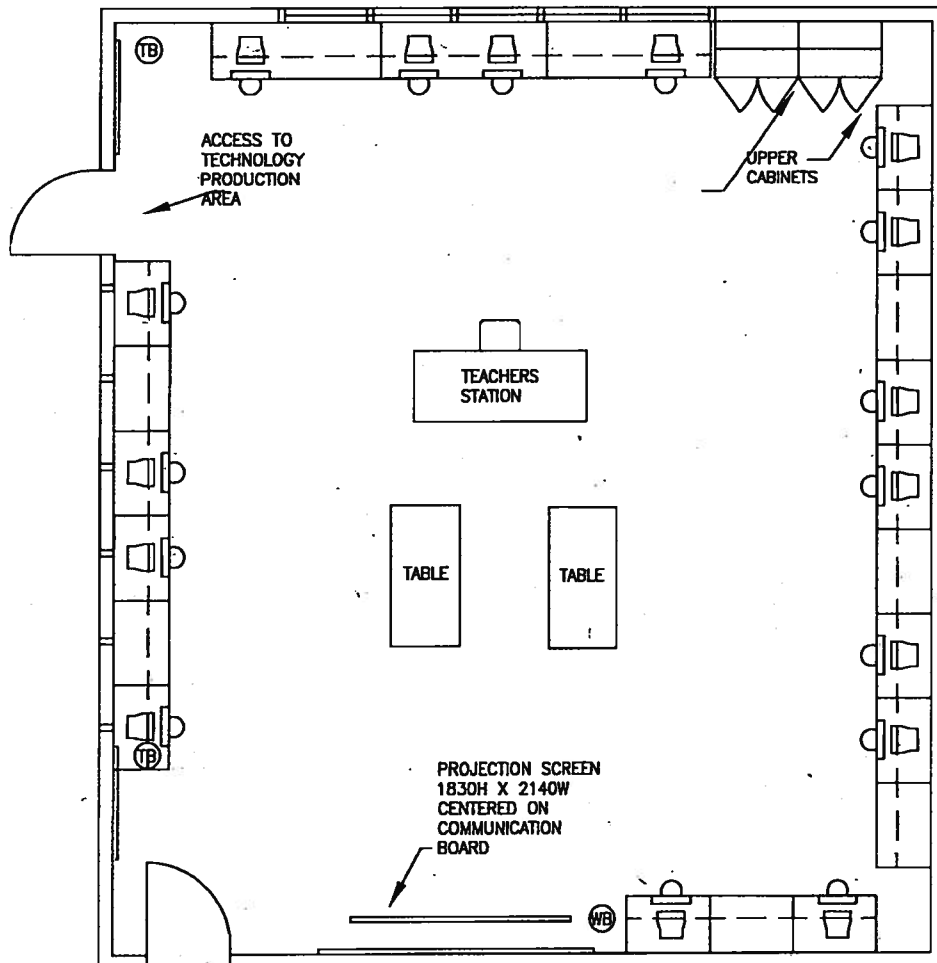
PROJECT NO.
W01-02-01-02

SCALE
N.T.S.

DATE:
07-01-10

DWG. NO.

ASK-9



Transportation and
Infrastructure Renewal

Public Works

PROJECT DC350
DESIGN REQUIREMENTS MANUAL
2010 EDITION

DRAWING TECHNOLOGY INNOVATION

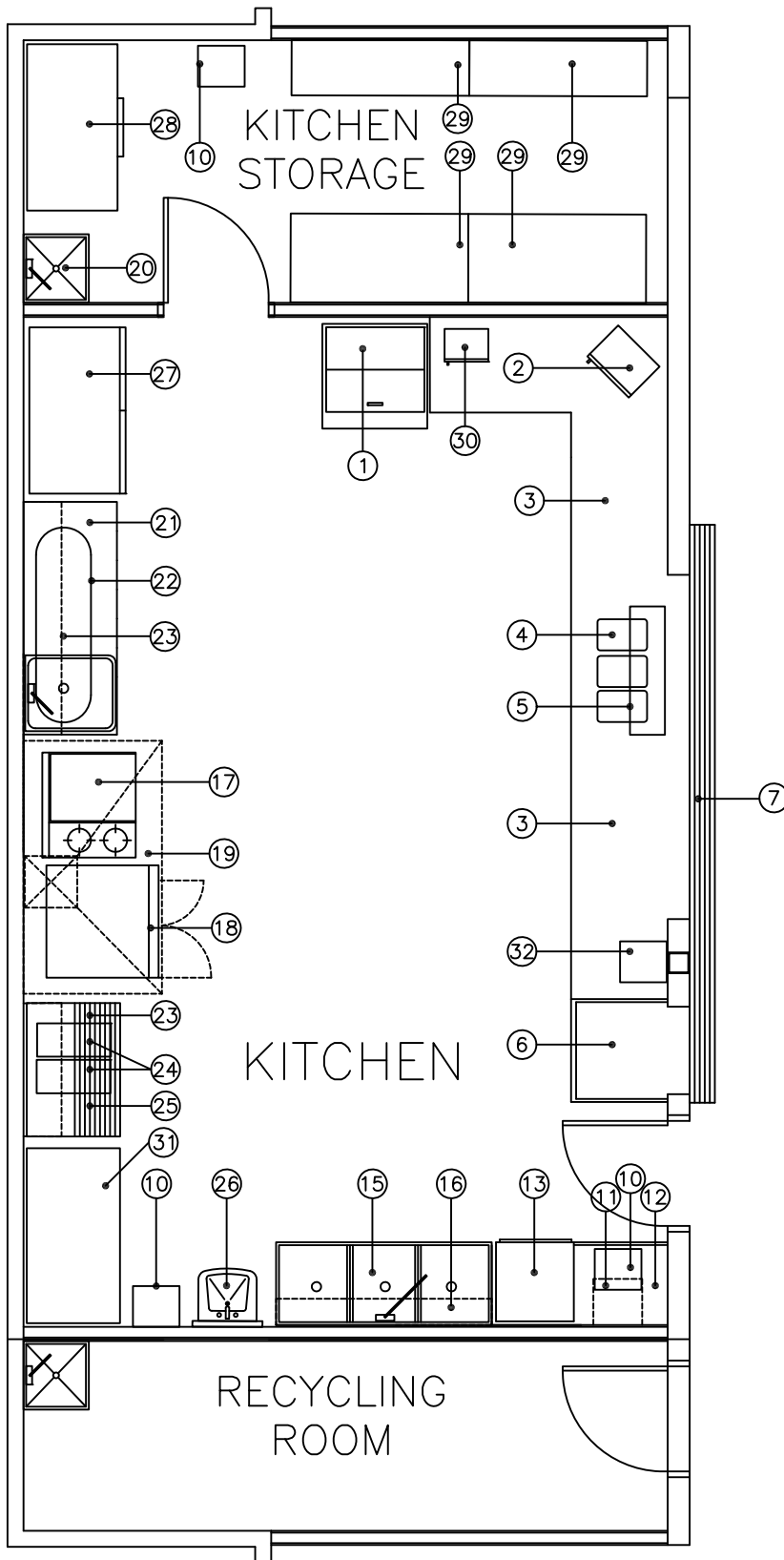
PROJECT NO.
W01-02-01-02

SCALE
NTS

DATE:
SEPT 15, 2010

DWG. NO.

ASK-10



KITCHEN EQUIPMENT LEGEND:

- 1 SANDWICH UNIT (FUTURE/NIC)
- 2 MICROWAVE OVEN
- 3 SERVERY COUNTER/SS TOP
- 4 HOT FOOD TABLE
- 5 OVERSHELF
- 6 DISPLAY COOLER
- 7 TRAY RAIL
- 10 RECYCLE BIN
- 11 DISH RACK SHELF
- 12 SOILED DISHTABLE
- 13 DISHWASHER
- 15 CLEAN DISHTABLE/ POT SINKS
- 16 WALL SHELF
- 17 RANGE
- 18 CONVECTION OVEN
- 19 EXHAUST HOOD
- 20 JANITOR SINK
- 21 WORK TABLE C/W SINK
- 22 POT RACK
- 23 OVERSHELF
- 24 MOBILE BINS
- 25 BAKERS TABLE
- 26 HAND SINK
- 27 REFRIGERATOR
- 28 CHEST FREEZER
- 29 WIRE SHELVING 24" AND 15" DP
- 30 BAGEL TOASTER (NIC)
- 31 MOBILE WORK TABLE
- 32 ELECTRONIC CASH REGISTER BY OWNER

CORRIDOR

24" COUNTER
SUITABLE FOR
CPU STATIONS.
SEE ROOM
DATA SHEET

(TB)
48"x48"

30" COUNTER
COUNTER FOR
COLLATING
PAPERWORK

FRIDGE

MICROWAVE

WORK
ROOM

F.D.

HOOK

W.C.

HOOK

W.C.

F.D.

COAT CLOSET

MAILSLOTS

STAFF
ROOM

(TB)
48"x48"

NOTE:
BOTH WATERCLOSETS TO HAVE
BARRIER FREE WALL HUNG
LAVATORIES. BOTH SHOWERS
TO BE BARRIER FREE.


NOVASCOTIA
Transportation and Public Works
Public Works

PROJECT DC350
DESIGN REQUIREMENTS MANUAL
2007 EDITION

DRAWING
TYPICAL STAFF ROOM LAYOUT

PROJECT NO.
W01-02-01-02

SCALE
N.T.S.

DATE:
07-01-10

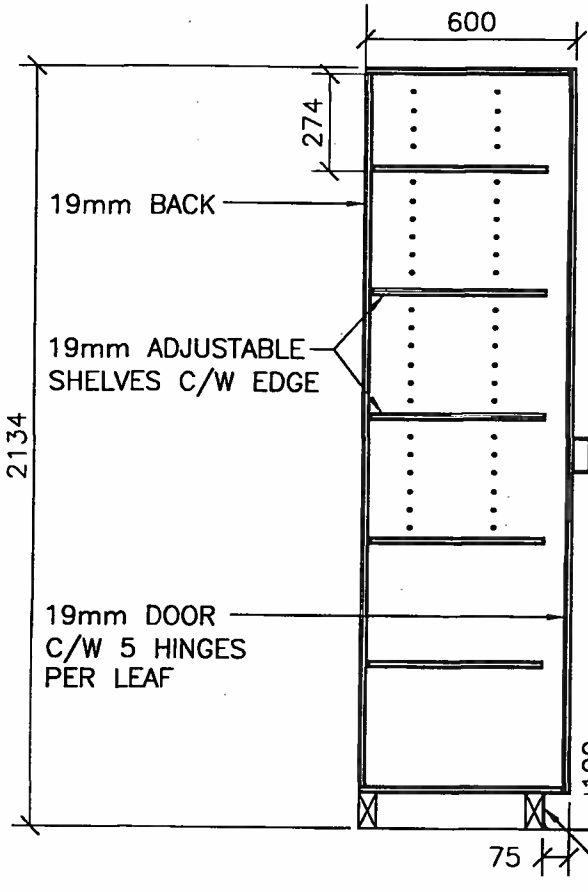
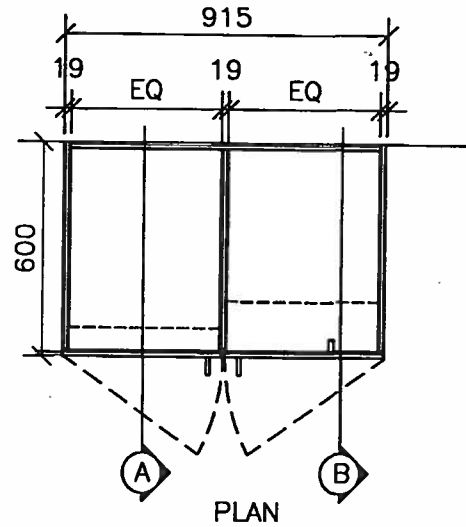
DWG. NO.

ASK-12

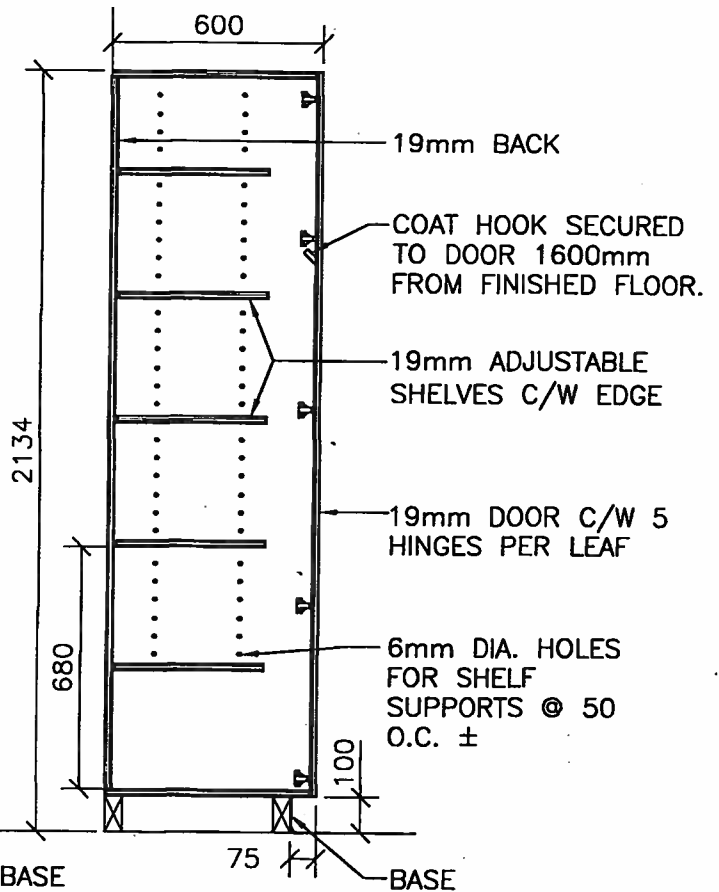
NOTES:

TEACHER'S CLOSET DOOR SHALL BE LOCKABLE.

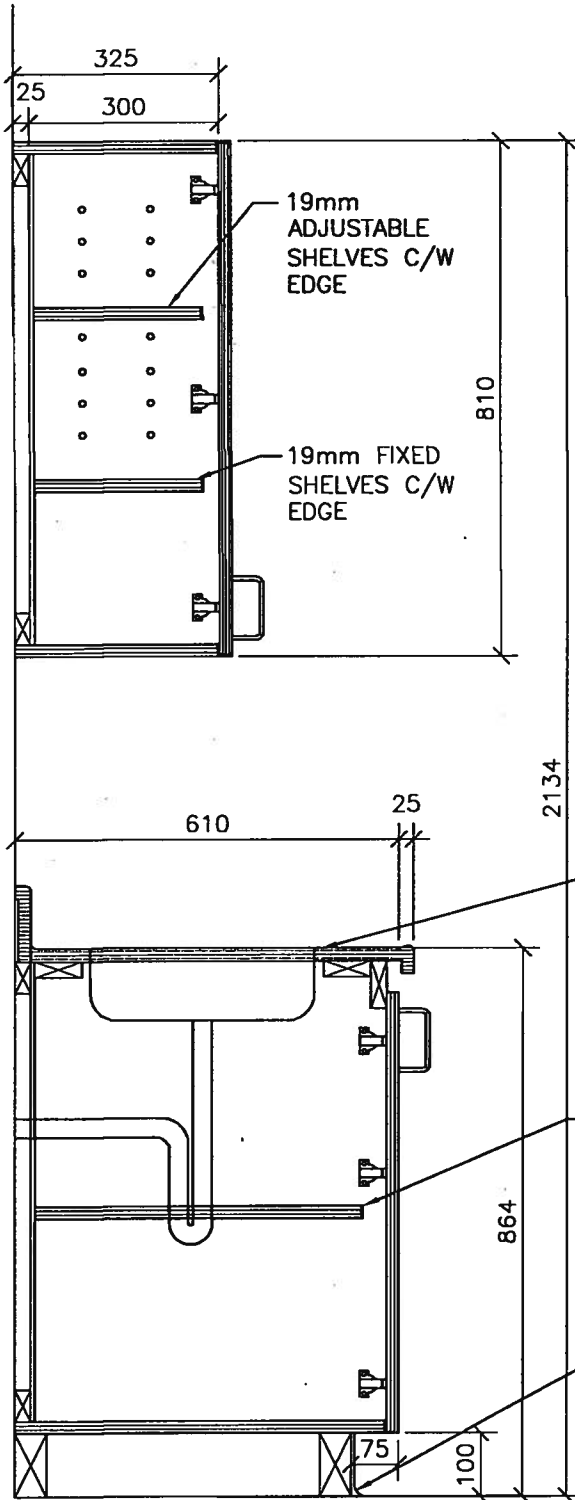
PROVIDE ALL HARDWARE ITEMS: HINGES, PULLS, SHELF SUPPORTS, COAT HOOKS, DOOR HOOKS.



SECTION A



SECTION B



NOTE:
 PRIMARY, 1, 2 CLASSES
 INCLUDE SINKS. GRADES 3-12,
 PROVIDE 2 ADJUSTABLE
 SHELVES, NO SINKS. REFER
 TO ROOM DATA SHEETS FOR
 COUNTER TOP A.F.F. HEIGHTS



PROJECT DC350
 DESIGN REQUIREMENTS MANUAL
 2006 EDITION

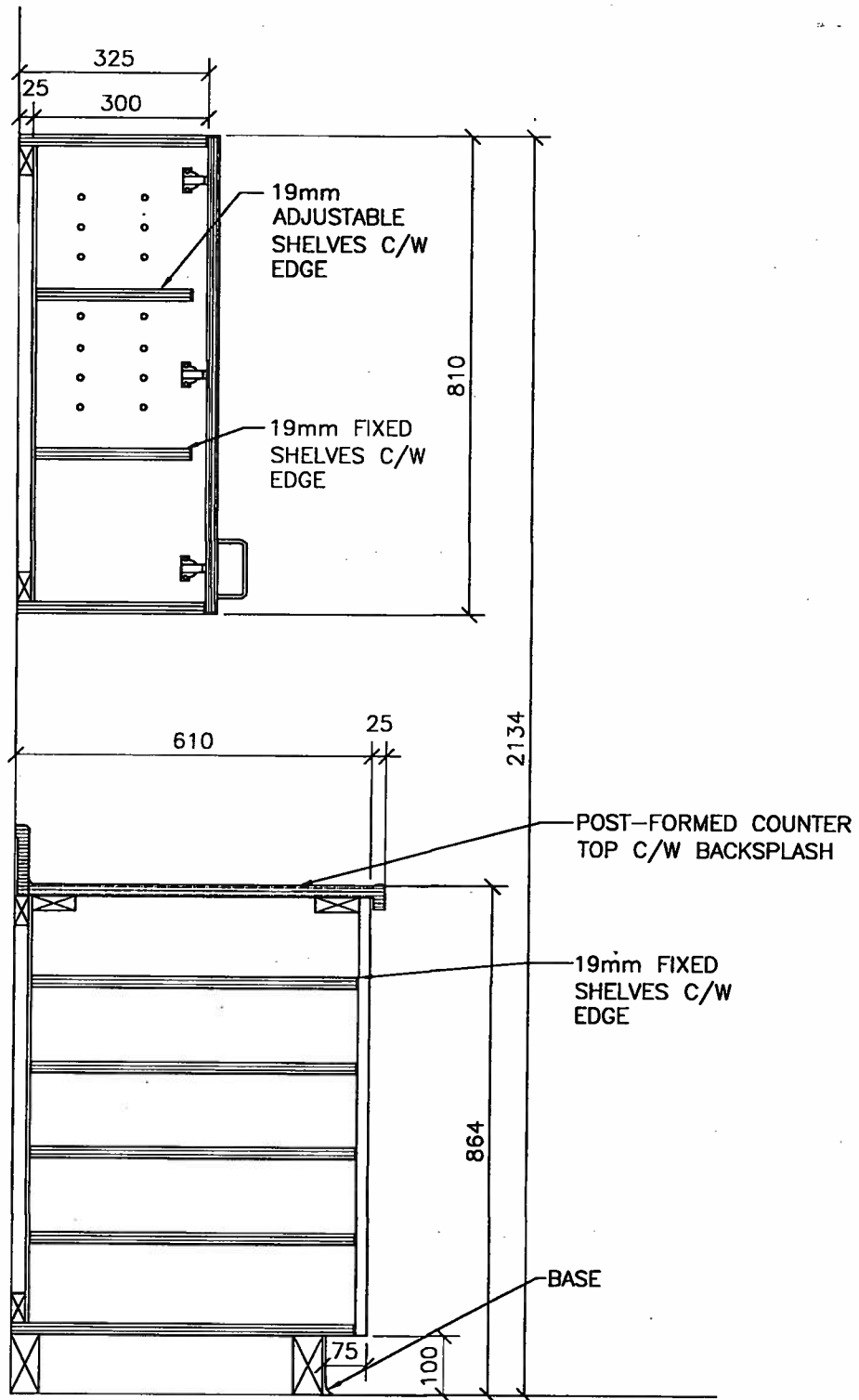
PROJECT NO.
 W01-02-01-02

SCALE
 N.T.S.

DWG. NO.
 ASK-13b

DRAWING TYPICAL CLASSROOM CASEWORK
 UNIT 2 - STANDARD CABINET

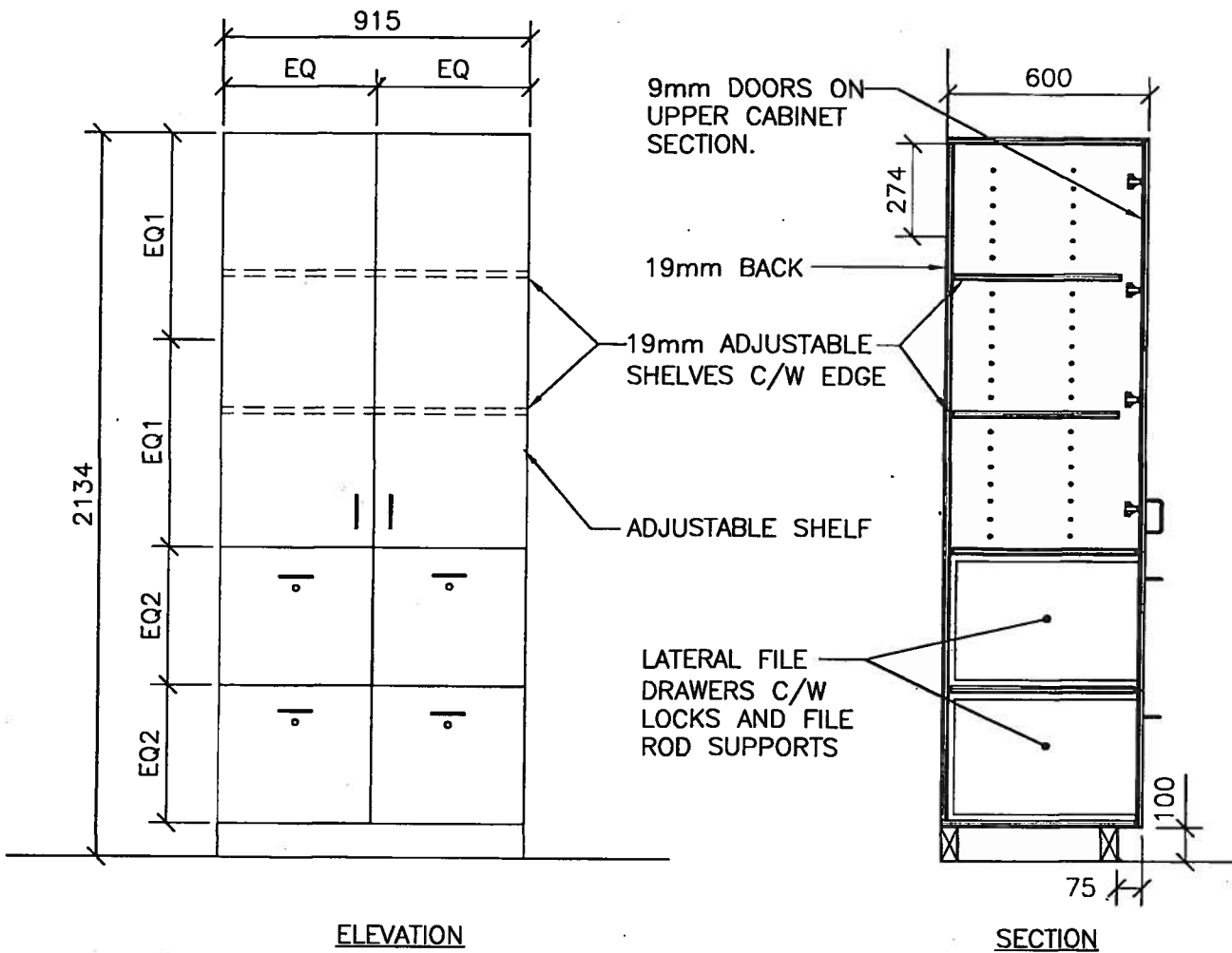
DATE:
 06-10-10



NOTES:

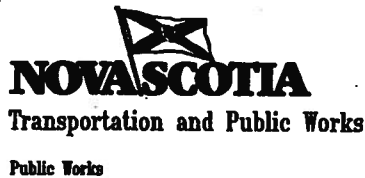
LATERAL FILE DRAWERS SHALL BE LOCKABLE.

PROVIDE ALL HARDWARE ITEMS: HINGES, PULLS, SHELF SUPPORTS, COAT HOOKS, DOOR HOOKS.



ELEVATION

SECTION



PROJECT DC350
DESIGN REQUIREMENTS MANUAL
2007 EDITION

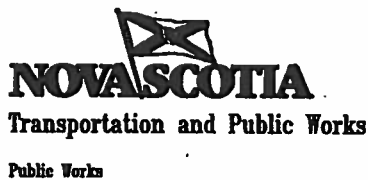
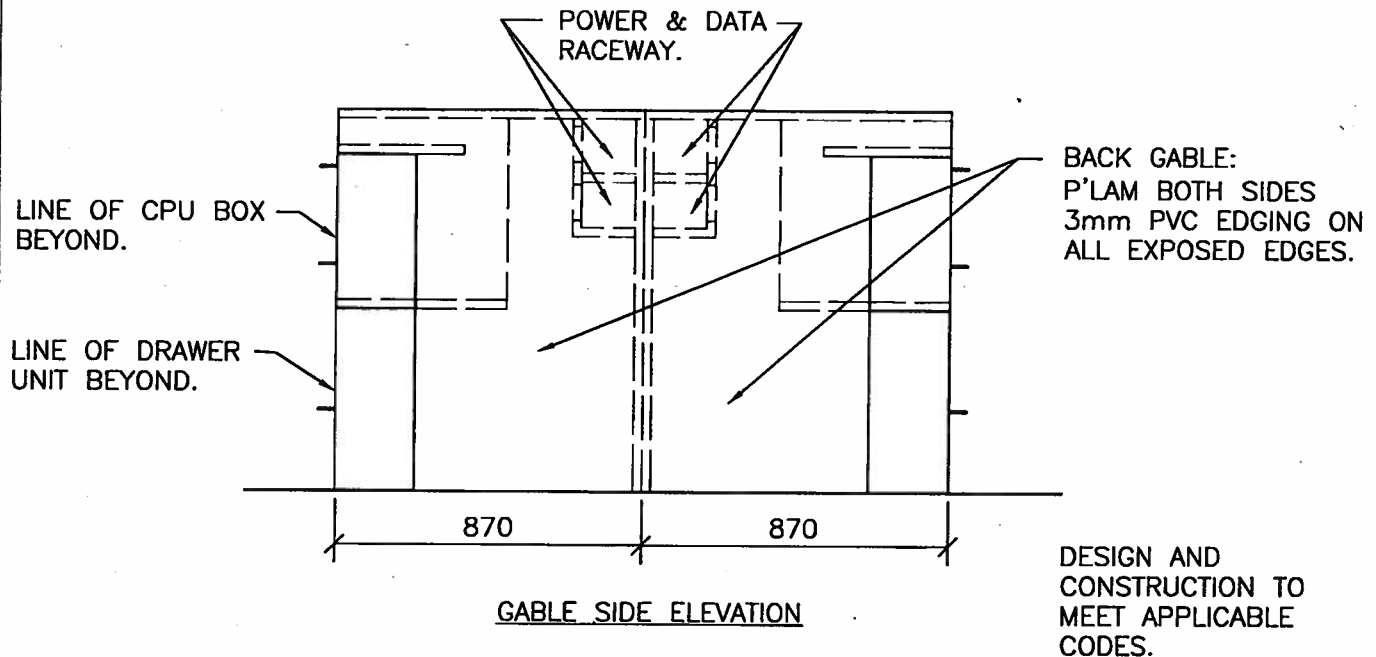
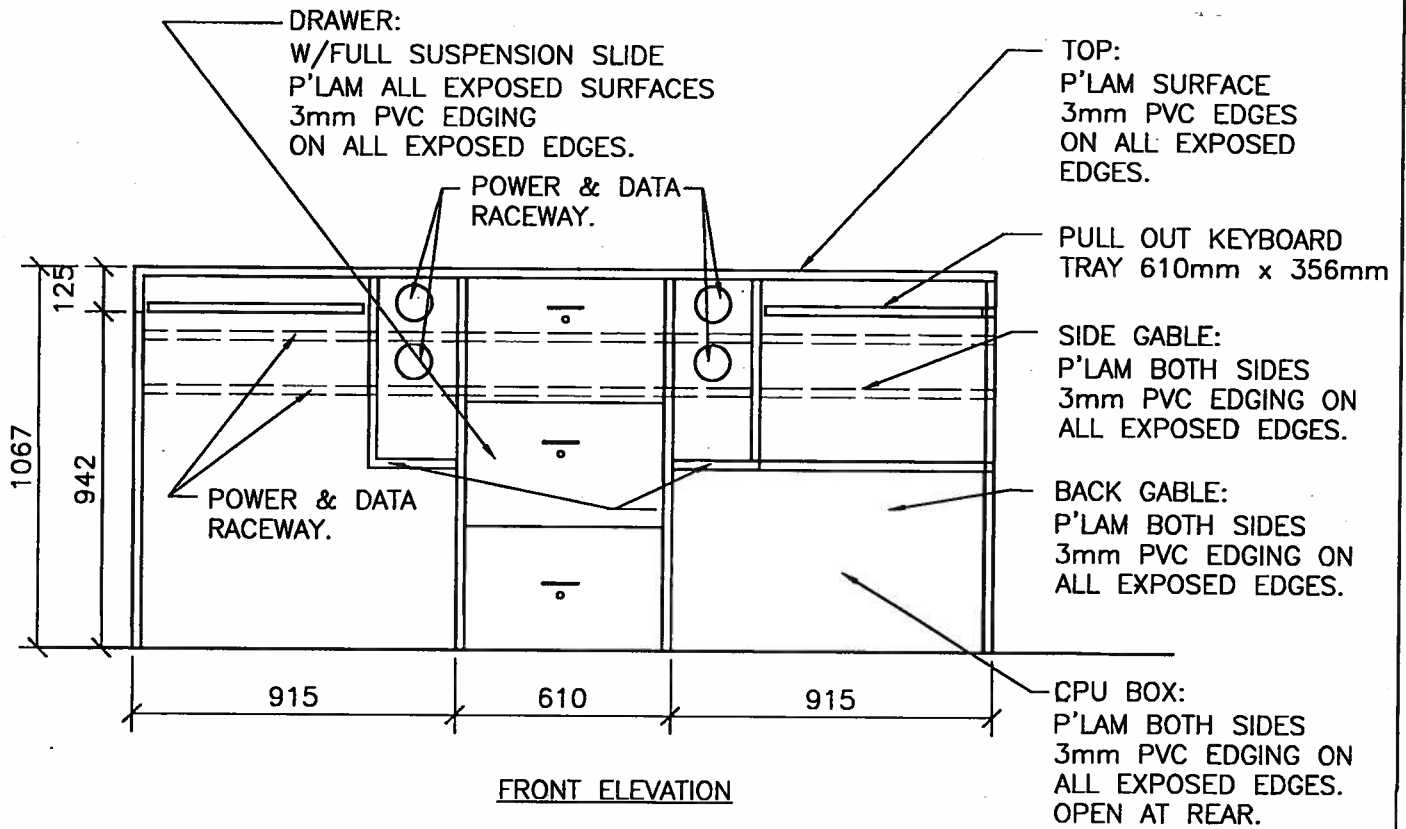
PROJECT NO.
W01-02-01-02
SCALE
N.T.S.

DWG. NO.

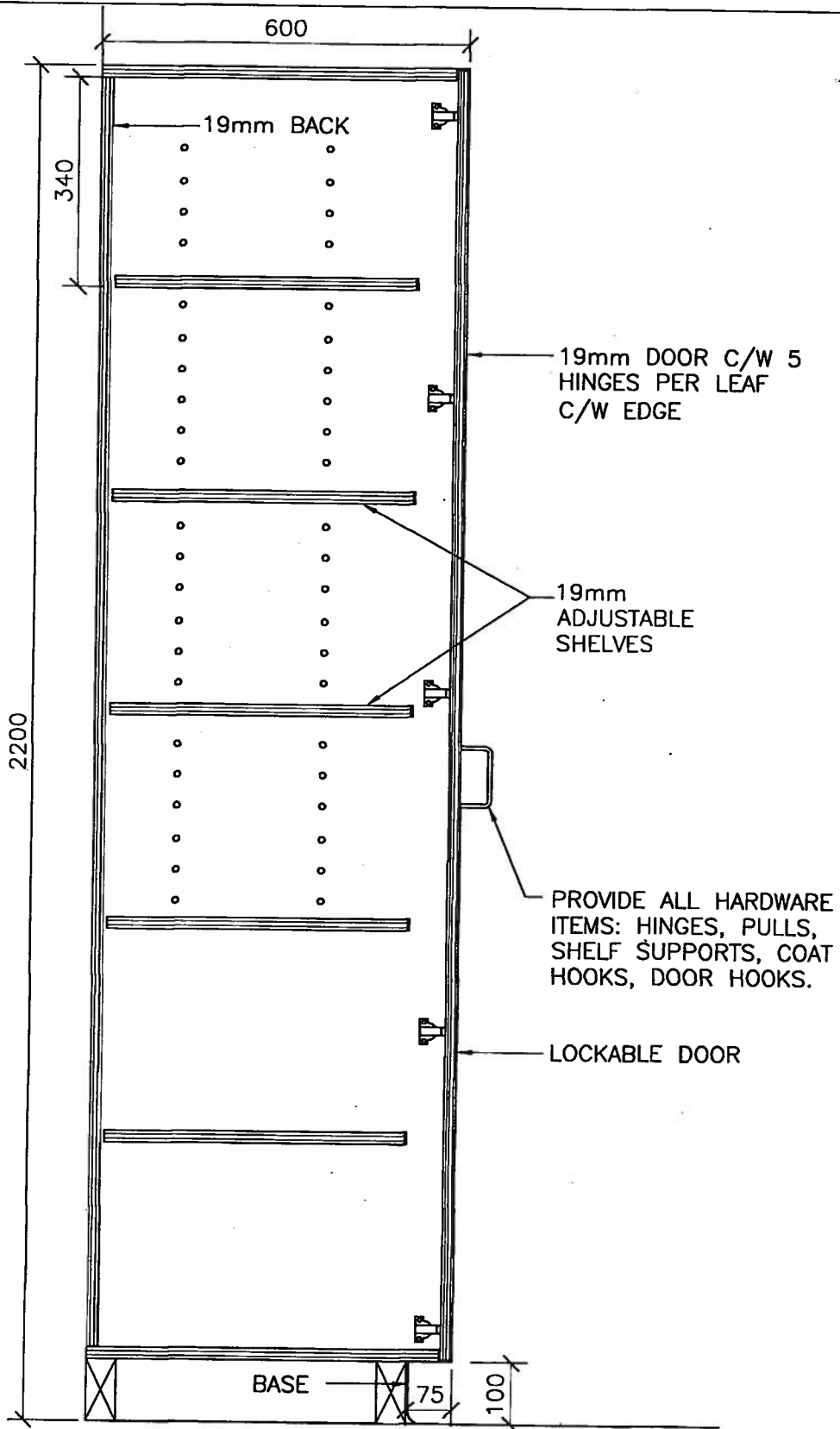
DRAWING TYPICAL CLASSROOM CASEWORK
UNIT FOUR - CABINET AND LATERAL FILES

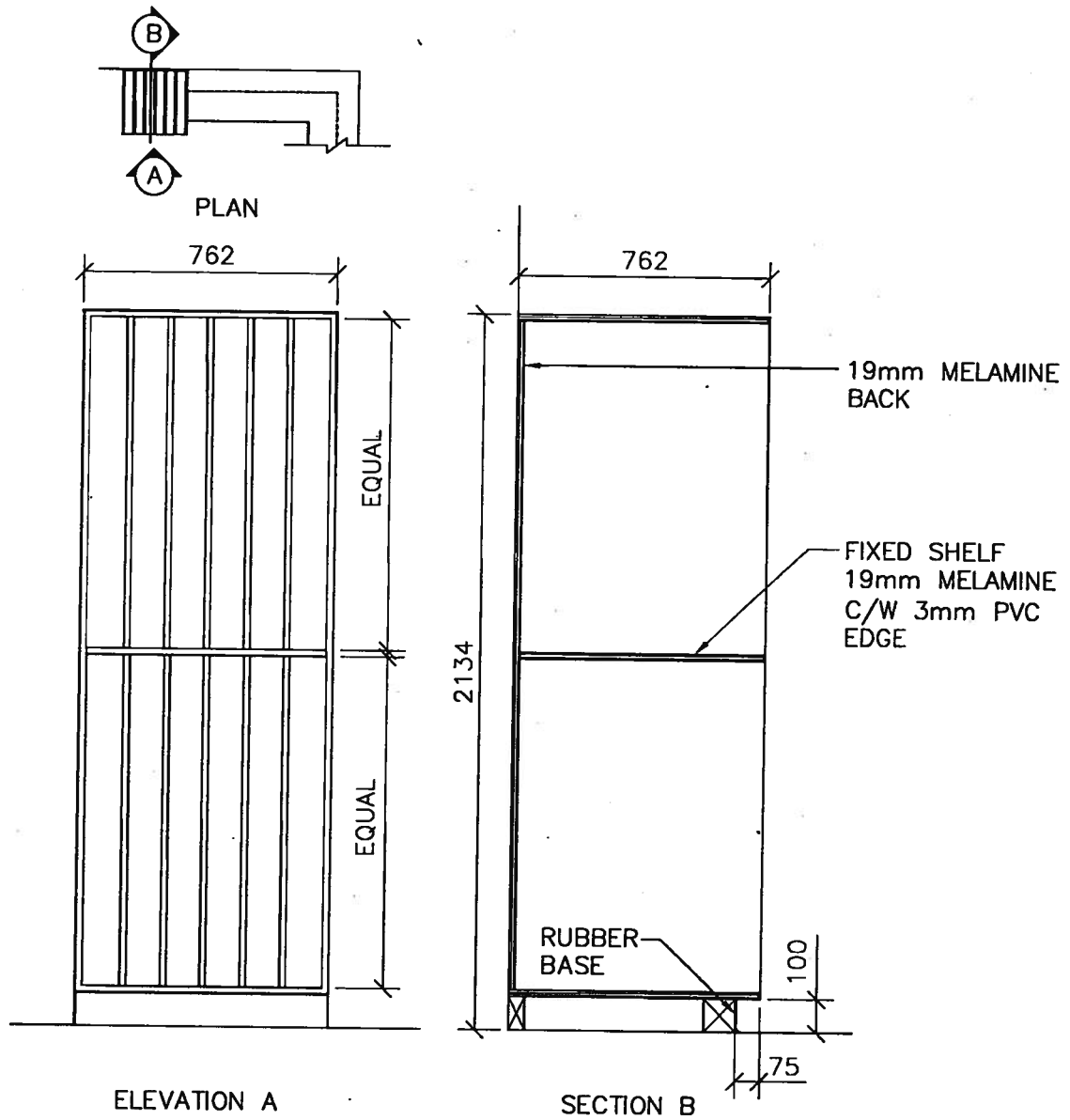
DATE:
07-01-10

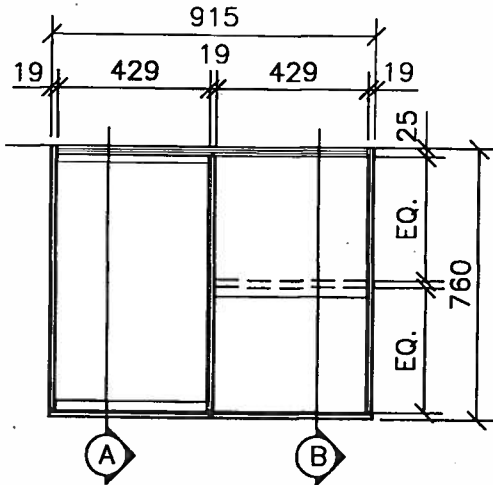
ASK-13d



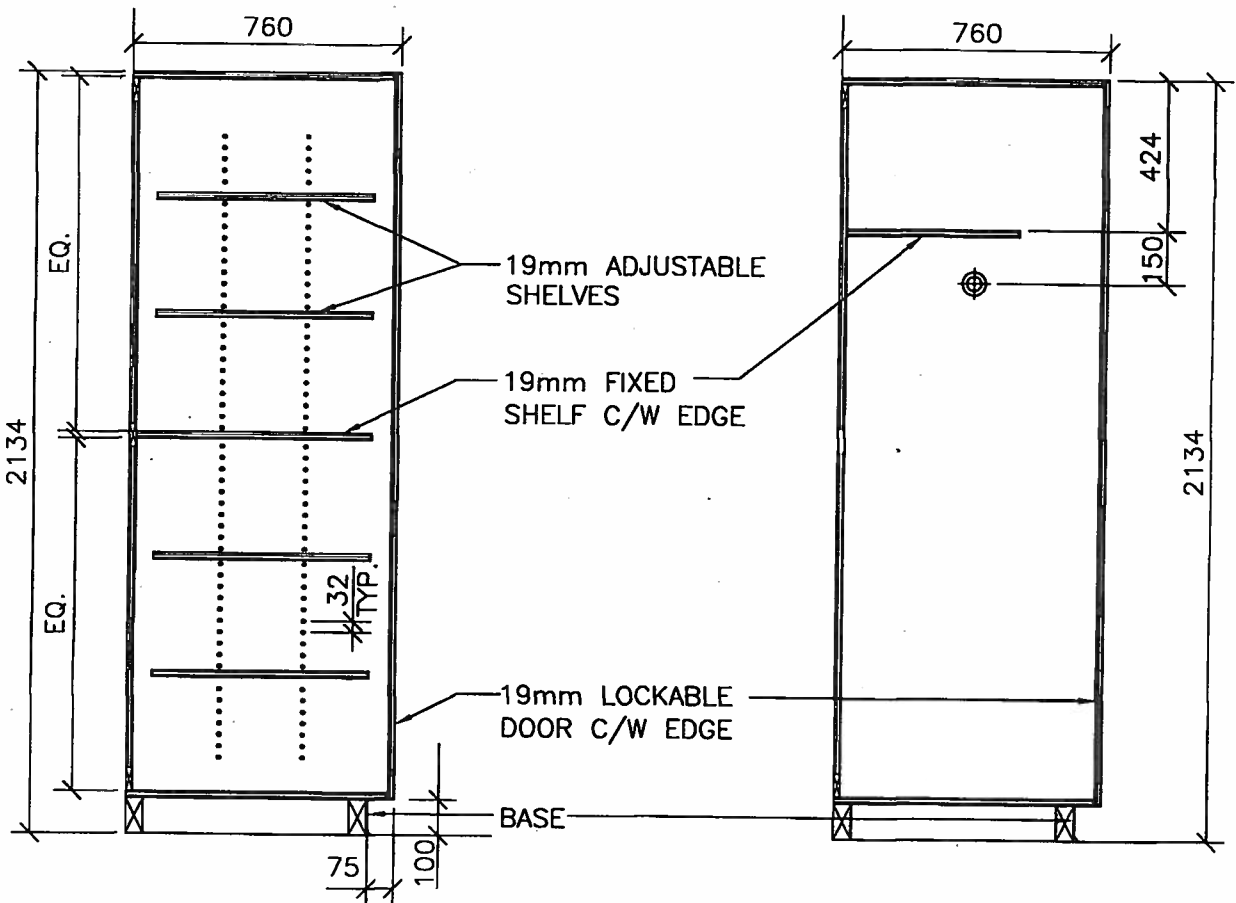
PROJECT DC350 DESIGN REQUIREMENTS MANUAL 2007 EDITION	PROJECT NO. W01-02-01-02	DWG. NO. ASK-14
	SCALE N.T.S.	
DRAWING TYPICAL TECH. EDUCATION COMPUTER DESK	DATE: 07-01-10	







PLAN



SECTION A

SECTION B



PROJECT DC350
 DESIGN REQUIREMENTS MANUAL
 2007 EDITION

PROJECT NO.
 W01-02-01-02
 SCALE
 N.T.S.

DWG. NO.
 ASK-17

DRAWING
 DRAMA ROOM - COSTUME STORAGE CABINET

DATE:
 07-01-10

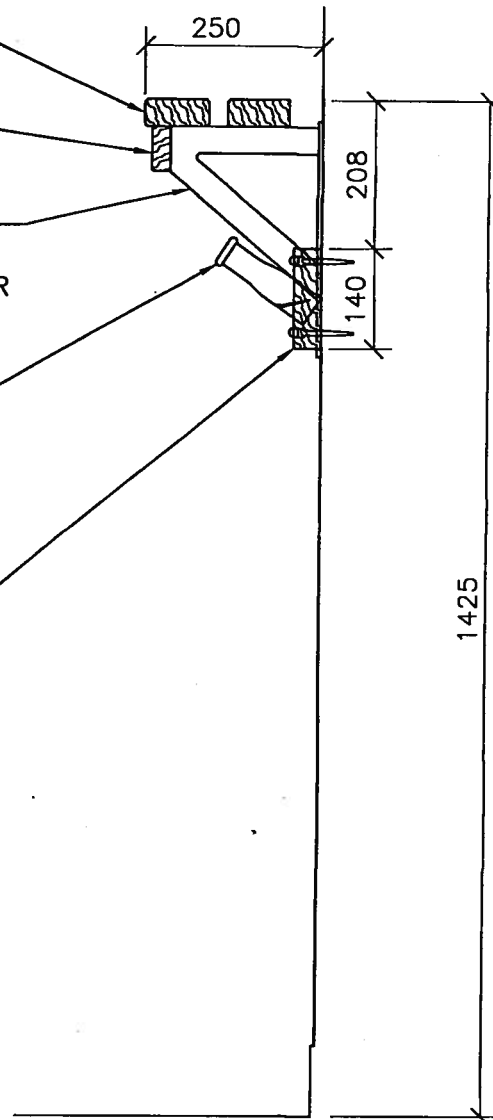
2 - 38 X 89 MAPLE/BIRCH
CONTIN. C/W RADIUS EDGES
BOLT & PLUG TO BRACKET.

19 X 55 NOM. MAPLE APRON

38 X 38 TUBULAR PIPE BRACKETS C/W
75 X 330 X 6 MOUNTING PLATE. 2
BOLTS PER BRACKET (TOGGLE BOLTS FOR
BLOCK & CONCRETE. INSERT TYPE FOR
INSULATED FORMING SYSTEM)

45 X 152 TURNED MAPLE/BIRCH
COAT HOOKS (MILK BOTTLE SHAPE)
200mm O.C. DOWELLED & GLUED
INTO PLATE. SECURE PLATE WITH
SCREW AND FINISH WITH WOOD
BUTTON CAP.

38 X 140 MAPLE/BIRCH PLATE
CONTIN. BETWEEN BRACKETS

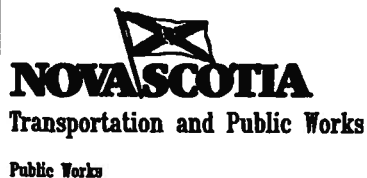


NOTES:

REINFORCE BEHIND DRYWALL WHERE
REQUIRED - REFER TO FLOOR PLANS.

BRACKETS & PLATES PAINTED, WOOD
CLEAR FINISH.

FULL RADIUS RETURN AT ALL BENCH
AND SHELF ENDS.



PROJECT DC350
DESIGN REQUIREMENTS MANUAL
2007 EDITION

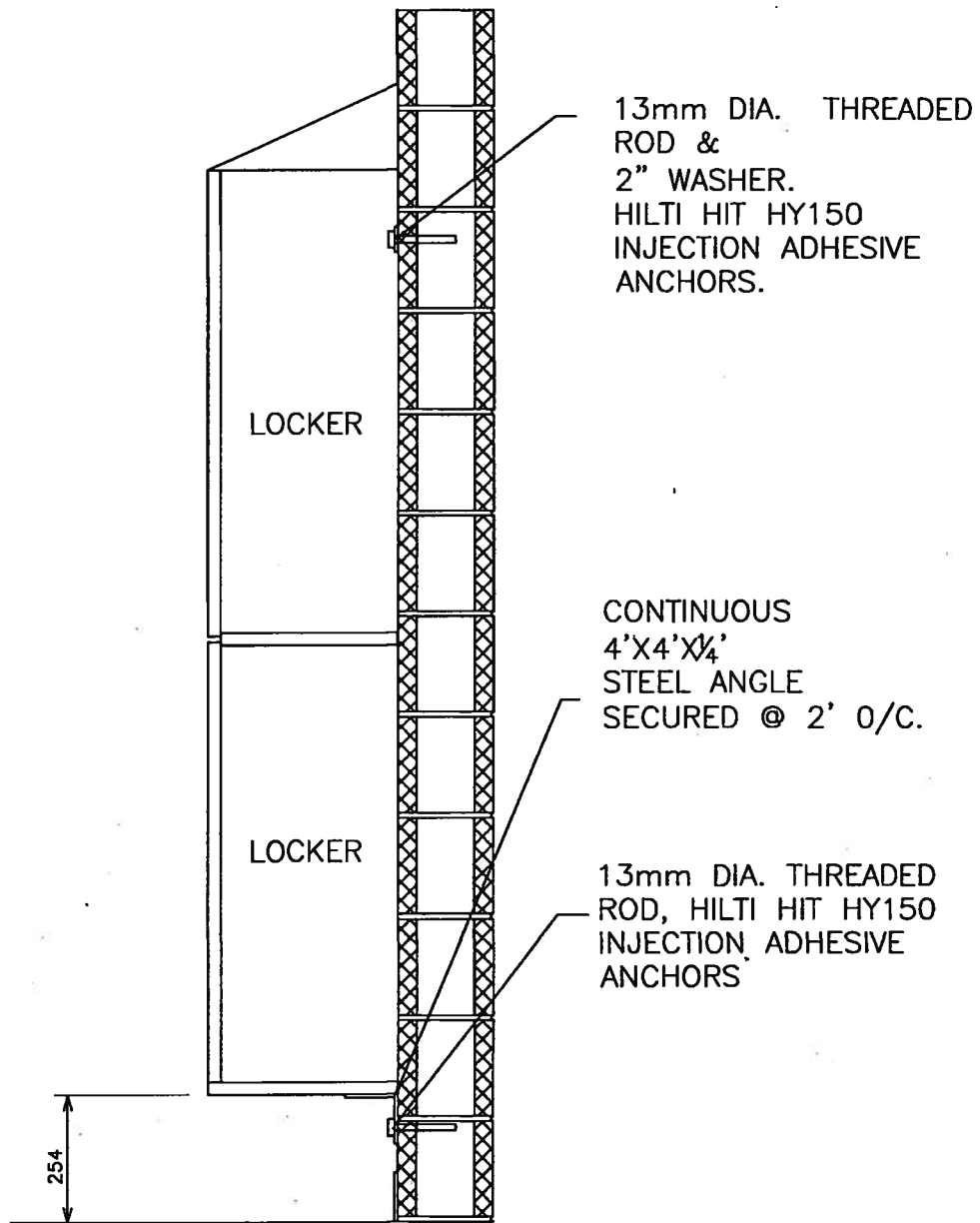
PROJECT NO.
W01-02-01-02
SCALE
N.T.S.

DWG. NO.


DRAWING
COAT HOOKS, HAT RACK

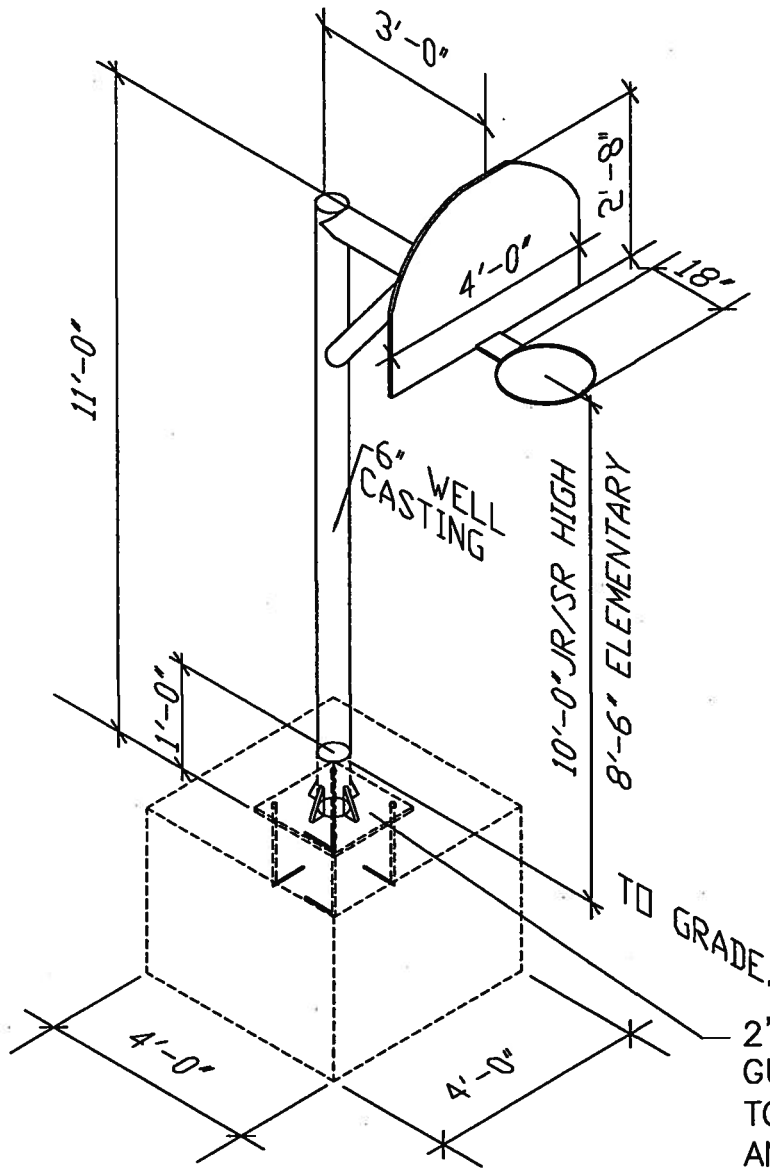
DATE:
07-01-10

ASK-18



NOTE;
 LOCKERS TO BE SUPPLIED WITHOUT LOCKER BASES.
 REINFORCE BEHIND DRYWALL WHERE REQUIRED
 - REFER TO FLOOR PLANS.

 NOVA SCOTIA Transportation and Public Works <small>Public Works</small>	PROJECT DC350 DESIGN REQUIREMENTS MANUAL 2007 EDITION	PROJECT NO. W01-02-01-02	DWG. NO. ASK-19
	DRAWING LOCKER SUPPORT DETAIL	SCALE N.T.S.	




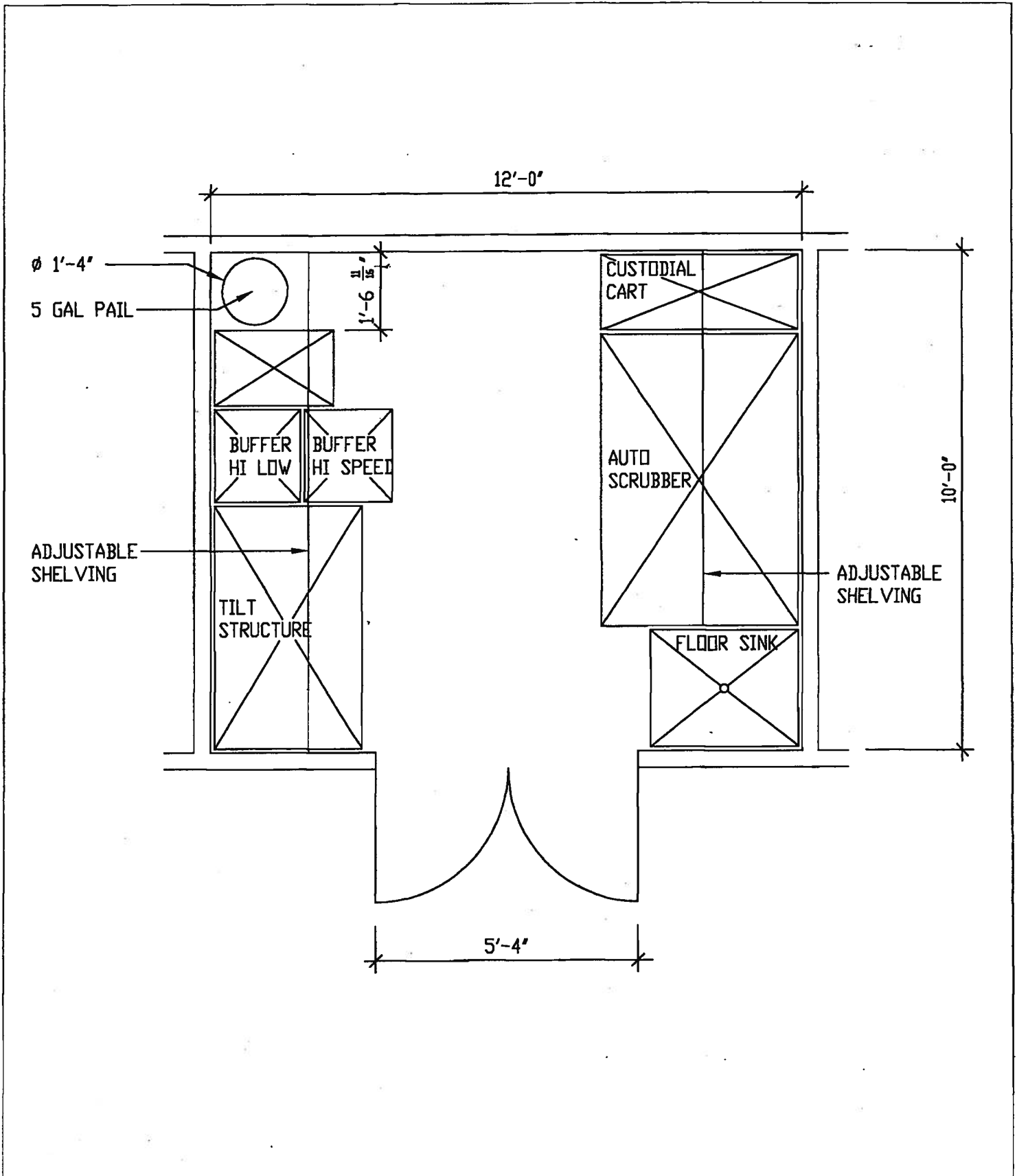
REINFORCED $\frac{1}{4}$ " PLATE METAL BACKBOARD.

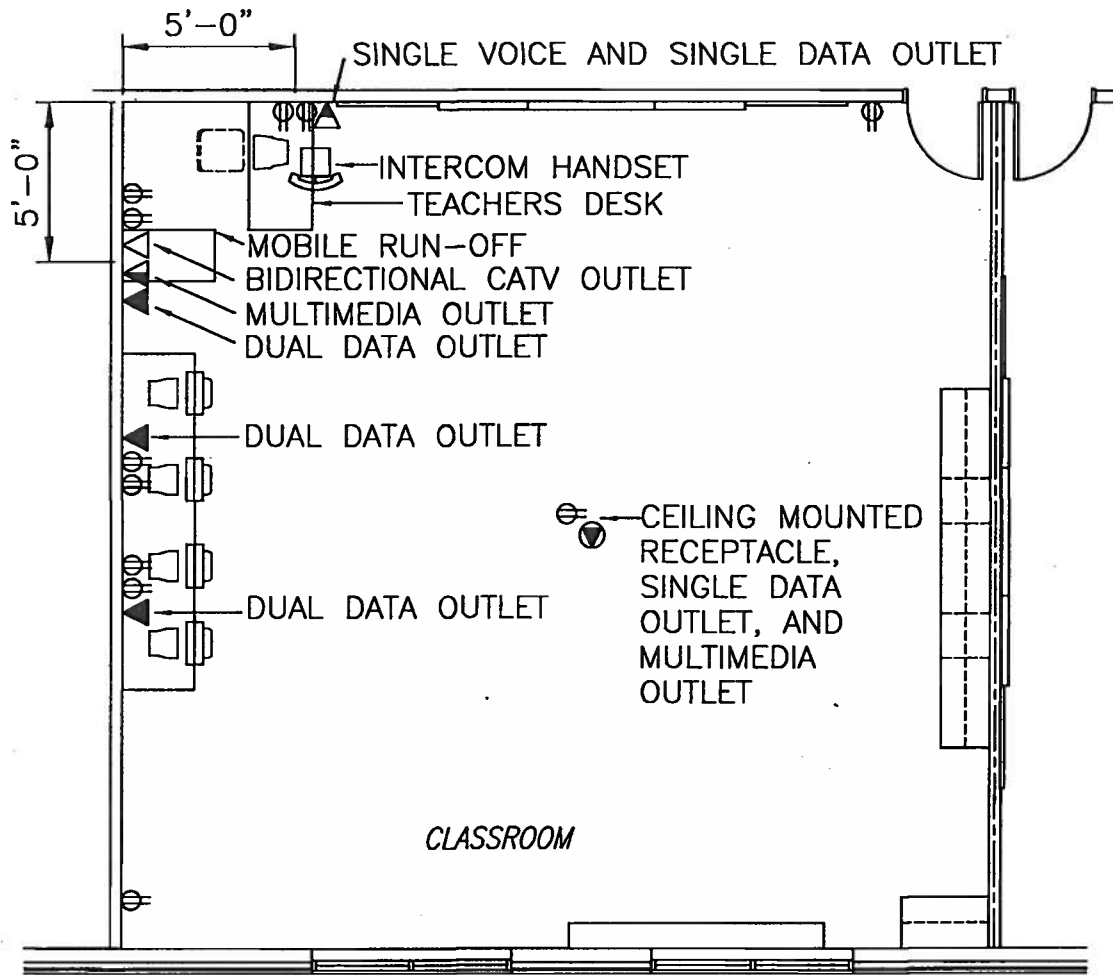
HEAVY METAL RIM 18" DIA.
 $\frac{1}{2}$ " TO 2" ROLLED FLAT BAR.

2"x2"x $\frac{3}{4}$ " BASE PLATE AND GUSSET.

TO BE INSTALLED WITH $\frac{3}{4}$ " ANCHOR BOLTS, 1'-0" BELOW GRADE.

 NOVA SCOTIA Transportation and Public Works Public Works	PROJECT DC350 DESIGN REQUIREMENTS MANUAL 2007 EDITION	PROJECT NO. W01-02-01-02	DWG. NO. ASK-20
	DRAWING OUTSIDE BASKETBALL STANDARD	SCALE N.T.S.	





NOTE: THIS DRAWING IS INTENDED TO SHOW THE RELATIONSHIP OF FURNITURE WITHIN A TYPICAL CLASSROOM FOR ELECTRICAL REQUIREMENTS.

NOTE 1: DOUBLE GANG BACKBOX COMPLETE WITH SINGLE GANG SQUARE WELDED RAISED TILE RING FOR MEDIA CONVERTER (SUPPLIED AND INSTALLED BY OWNER). MEDIA CONVERTER TO BE MOUNTED ON TILE RING. PROVIDE A YELLOW LAMICOID WITH BLACK LETTERING FOR THIS ITEM.

NOTE 2: 1" EMT WALL STUB TURNED OUT INTO ACCESSIBLE CEILING SPACE.

NOTE 3: SINGLE DATA OUTLET (CABLED FROM THE MAIN TELECOMMUNICATIONS ROOM) LOCATED IN THE ACCESSIBLE CEILING SPACE ABOVE THE PROJECTOR AND WITHIN 30" OF CEILING, BOX TO BE MOUNTED IN A VERTICAL ORIENTATION.

NOTE 4: QUAD POWER OUTLET LOCATED IN THE ACCESSIBLE CEILING SPACE ABOVE THE PROJECTOR AND WITHIN 30" OF CEILING, BOX TO BE MOUNTED IN A VERTICAL ORIENTATION.

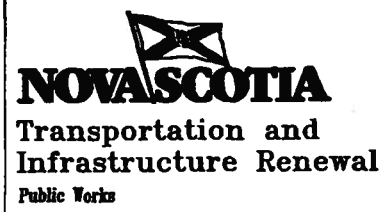
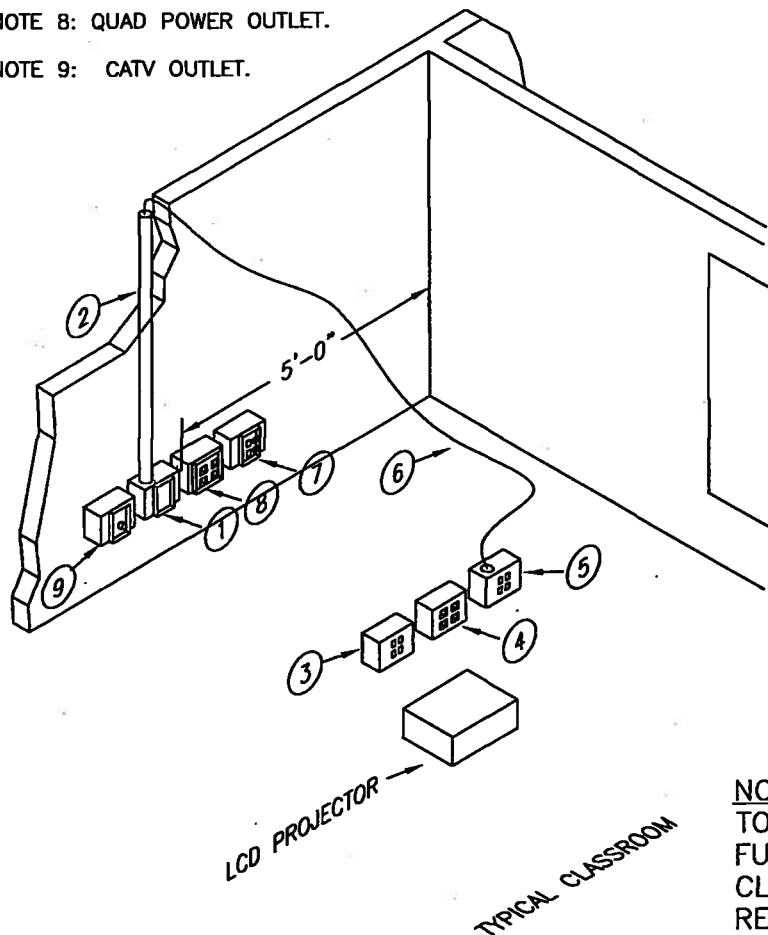
NOTE 5: DUAL MEDIA CONVERTER OUTLET COMPLETE WITH COVERPLATE AND YELLOW CONNECTORS LOCATED IN THE ACCESSIBLE CEILING SPACE ABOVE THE PROJECTOR AND WITHIN 30" OF CEILING, BOX TO BE MOUNTED IN A VERTICAL ORIENTATION. PROVIDE A YELLOW LAMICOID WITH BLACK LETTERING FOR THIS ITEM.

NOTE 6: TWO CATEGORY 6 CABLES (YELLOW JACKET) TERMINATED WITH A YELLOW 8P8C AT EACH END. CABLING TO BE ROUTED THROUGH THE ACCESSIBLE CEILING SPACE ON "J-HOOKS".

NOTE 7: DUAL DATA OUTLET (CABLED FROM THE MAIN TELECOMMUNICATIONS ROOM).

NOTE 8: QUAD POWER OUTLET.

NOTE 9: CATV OUTLET.



PROJECT	DC350	PROJECT NO.	W01-02-01-02
	DESIGN REQUIREMENTS MANUAL	SCALE	N.T.S.
	2010 EDITION	DATE:	10-07-19
DRAWING	CLASSROOM MEDIA CONVERTER LAYOUT		

DWG. NO.	ESK-2

**PROVINCE OF NOVA SCOTIA
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE RENEWAL**

DTIR Document DC350

APPENDICES

**EDUCATIONAL FACILITIES
DESIGN REQUIREMENTS**

Appendix D

Gymnasium Floor Layout

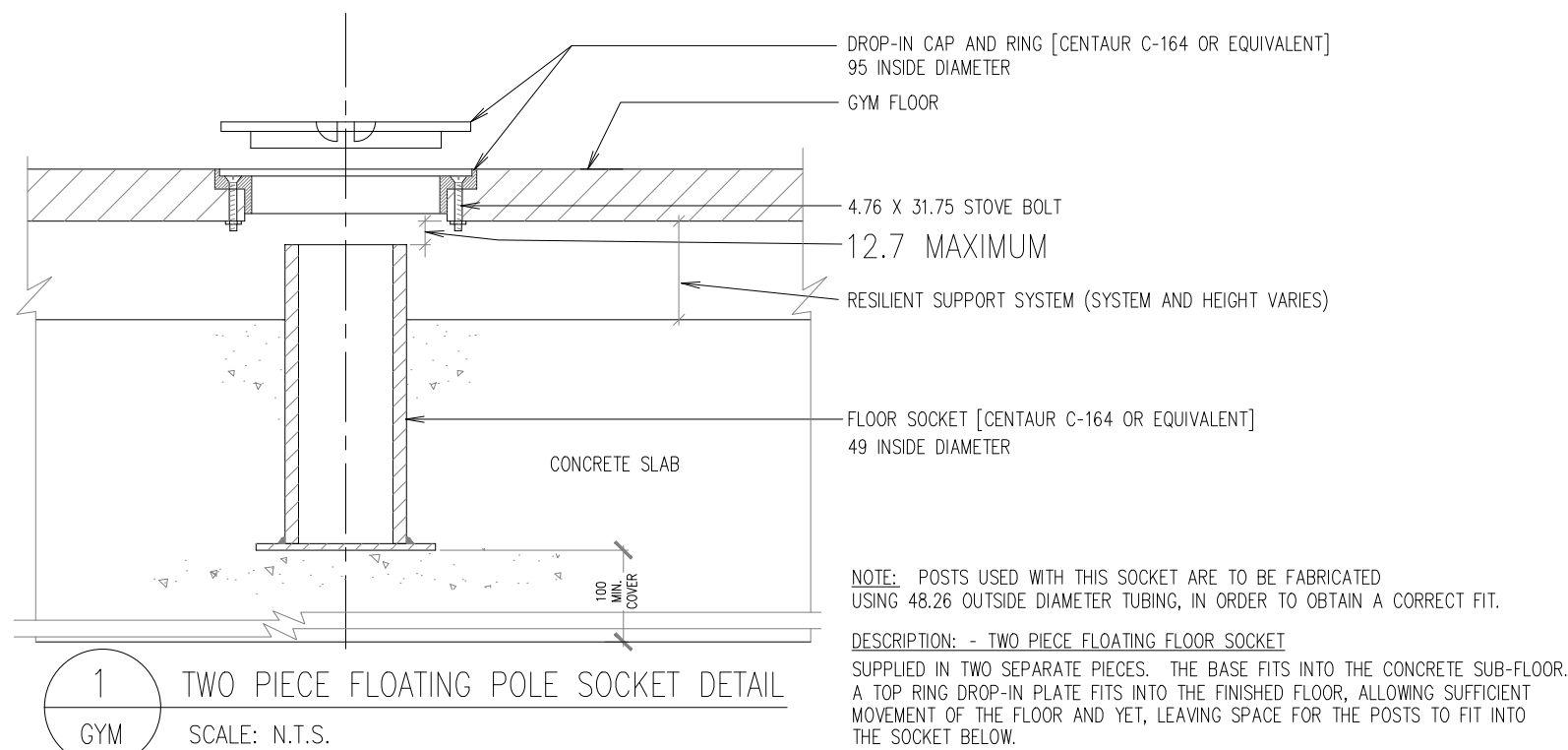
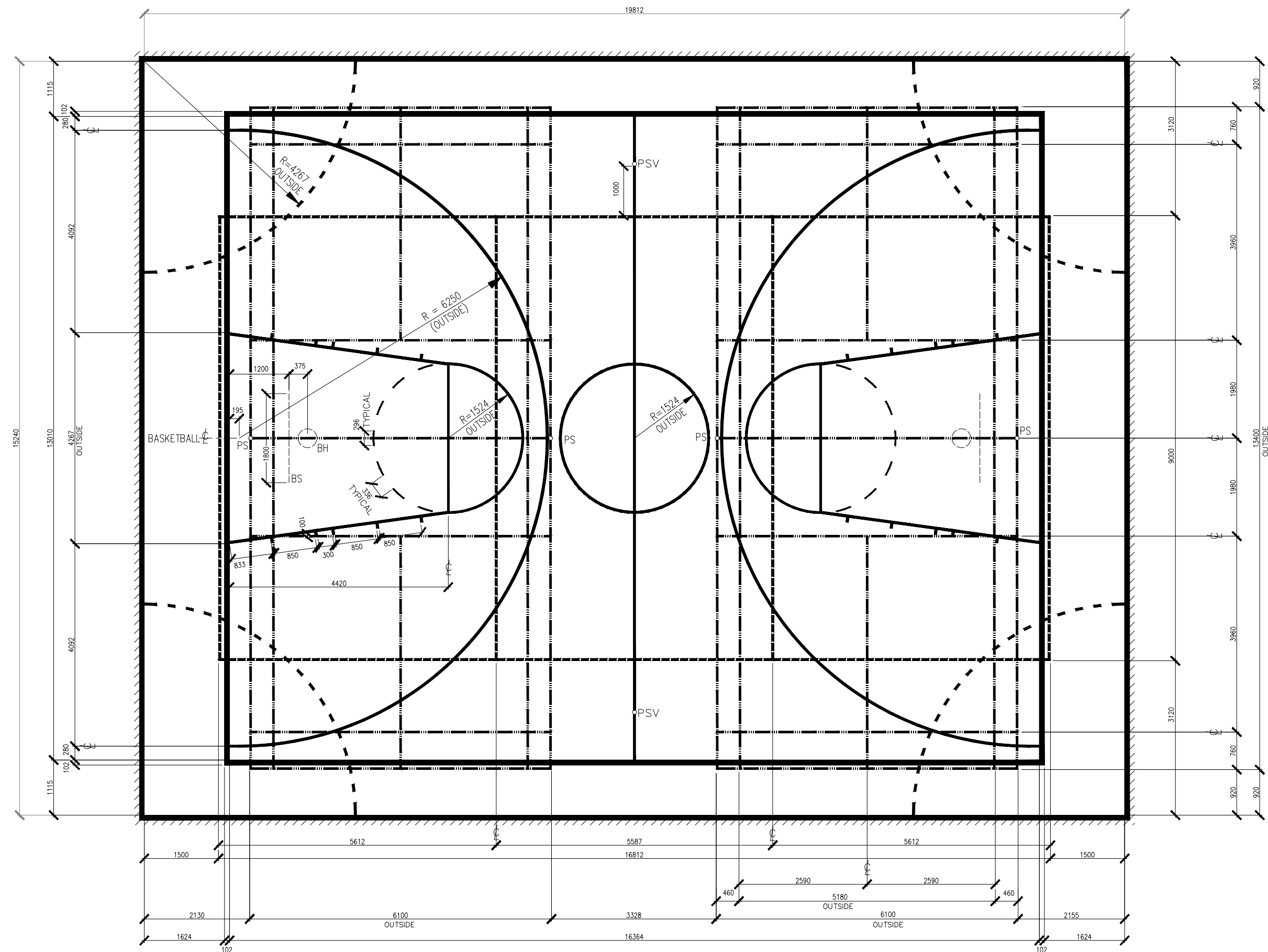
2007 EDITION

September 21, 2010

DC 350, Appendix B is not intended to be a complete architectural, mechanical or electrical specification for a school project. Such a complete specification must be written for each project by the Project Consultant.

This section, in conjunction with DC 350, Part 1 and Part 2 and other Appendices, specifies, in outline form, the minimum acceptable standards for school components.

KEY PLAN



LINE LEGEND:

COLOUR	SYMBOL	DESCRIPTION	WIDTH
BLACK	—————	BASKETBALL COURT PAINT THIS COURT FIRST.	50 WIDE SOLID LINES EXCEPT 100 WIDE AT PERIMETER
RED	—————	VOLLEYBALL COURT	50 WIDE SOLID LINES
WHITE	—————	BADMINTON COURT	40 WIDE SOLID LINES
BLUE	—————	GAMES AREA	50 WIDE SOLID LINES

NOTE: WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES. PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:

1. BASKETBALL
2. VOLLEYBALL
3. BADMINTON.

LEGEND:

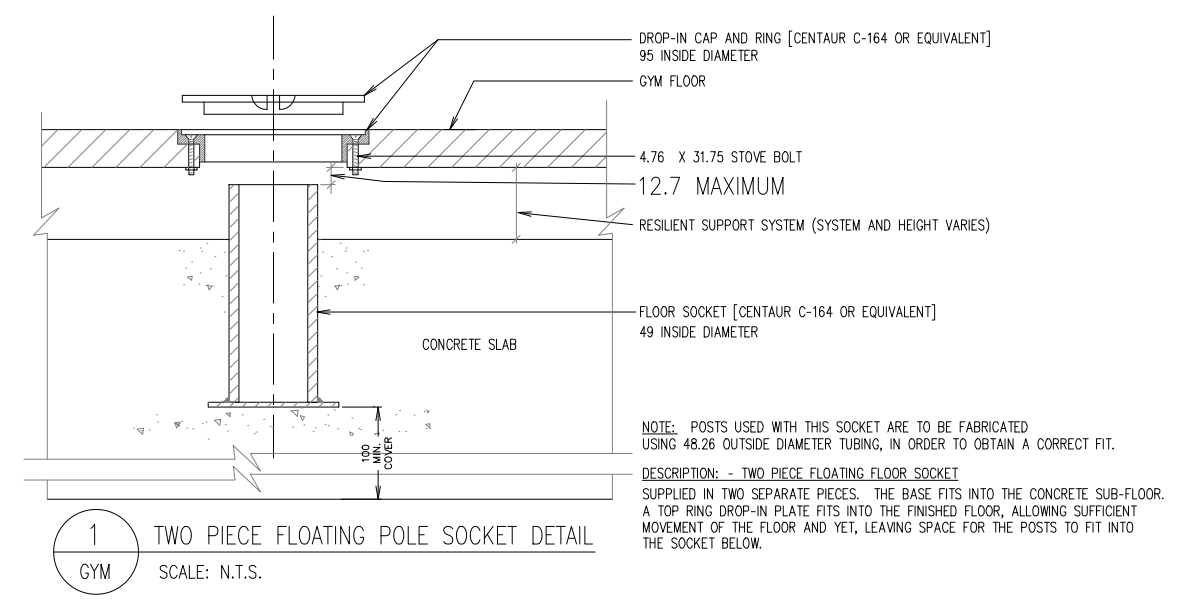
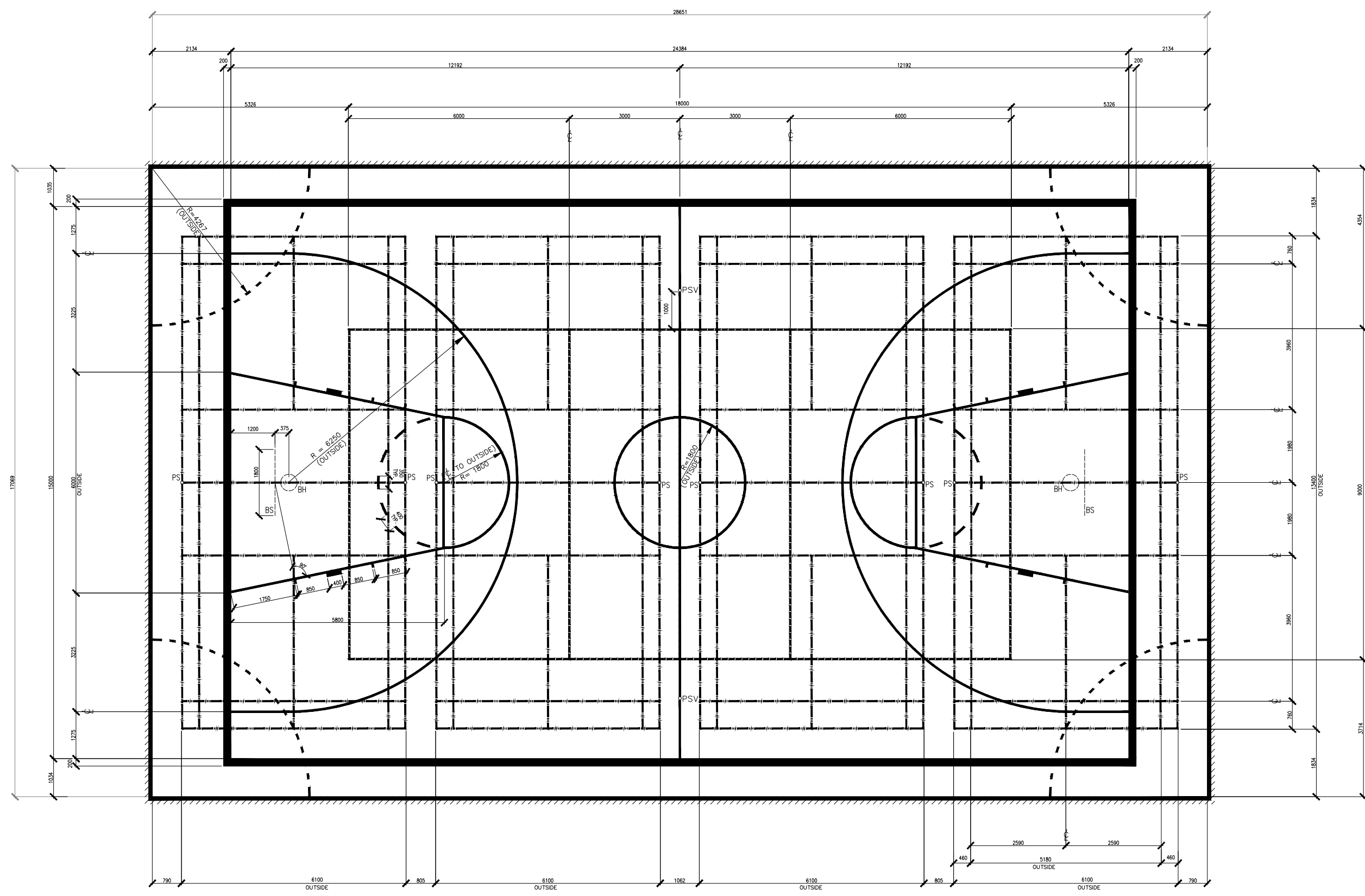
- PSV POLE SOCKET - VOLLEYBALL
- PS POLE SOCKET - BADMINTON
- BH BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.] TO TOP OF HOOP
- BS BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP.

NOTES:

1. NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
2. BADMINTON POLE SOCKETS ARE TO BE CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT.
3. VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
4. REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
5. COURT SIDELINE CLEARANCES ASSUME CLEAR DIMENSION AS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
7. MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

REVISIONS	DATE
A B	A - Detail No. B - Drawing No.
PROJECT GYMNASIUM FLOOR LAYOUT	
DRAWING ELEMENTARY GYM 65'-0" X 50'-0" AREA = 3250 Sq. Ft.	
SCALE 1 : 50	DATE May 10 2001
DRAWN BY jjj	CHECKED REVIEWED
APPROVED	DEPT. APPROVAL
SEAL	SEAL
DEPT. PROJECT NO.	DRAWING NO. GL 1
CONSULTANT'S NO.	
TENDER NO.	

KEY PLAN



LINE LEGEND:

COLOUR	SYMBOL	DESCRIPTION	WIDTH
BLACK	—	BASKETBALL COURT PAINT THIS COURT FIRST.	50 WIDE SOLID LINES EXCEPT 200 WIDE AT PERIMETER
RED	—	VOLLEYBALL COURT	50 WIDE SOLID LINES
WHITE	—	BADMINTON COURT	40 WIDE SOLID LINES
BLUE	- - -	GAMES AREA	50 WIDE SOLID LINES

NOTE: WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES.
 PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:
 1. BASKETBALL
 2. VOLLEYBALL
 3. BADMINTON.

LEGEND:

○ PSV	POLE SOCKET - VOLLEYBALL
○ PS	POLE SOCKET - BADMINTON
BH	BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.] TO TOP OF HOOP
BS	BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP

- NOTES:**
- NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
 - BADMINTON POLE SOCKETS ARE TO BE CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT.
 - VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
 - REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
 - COURT SIDELINE CLEARANCES ASSUME CLEAR AREA OF OVERALL DIMENSIONS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
 - MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

REVISIONS	DATE
A	A - Detail No.
B	B - Drawing No.

PROJECT
GYMNASIUM FLOOR LAYOUT

DRAWING
ELEMENTARY GYM
94'-0" X 56'-0"
AREA = 5264 Sq. Ft.

SCALE	DATE
1 : 50	May 10 2001

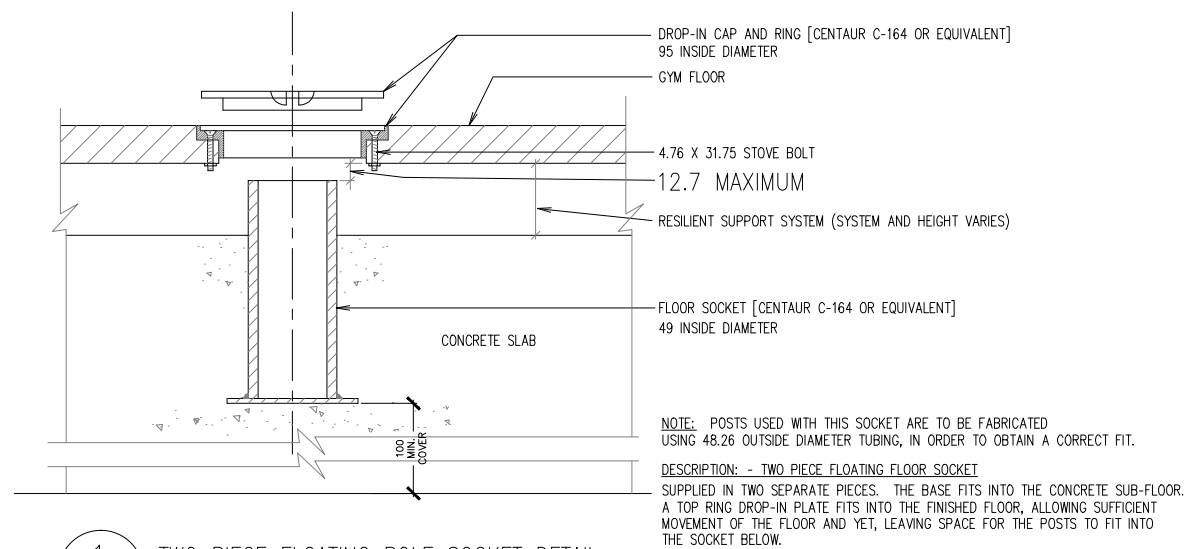
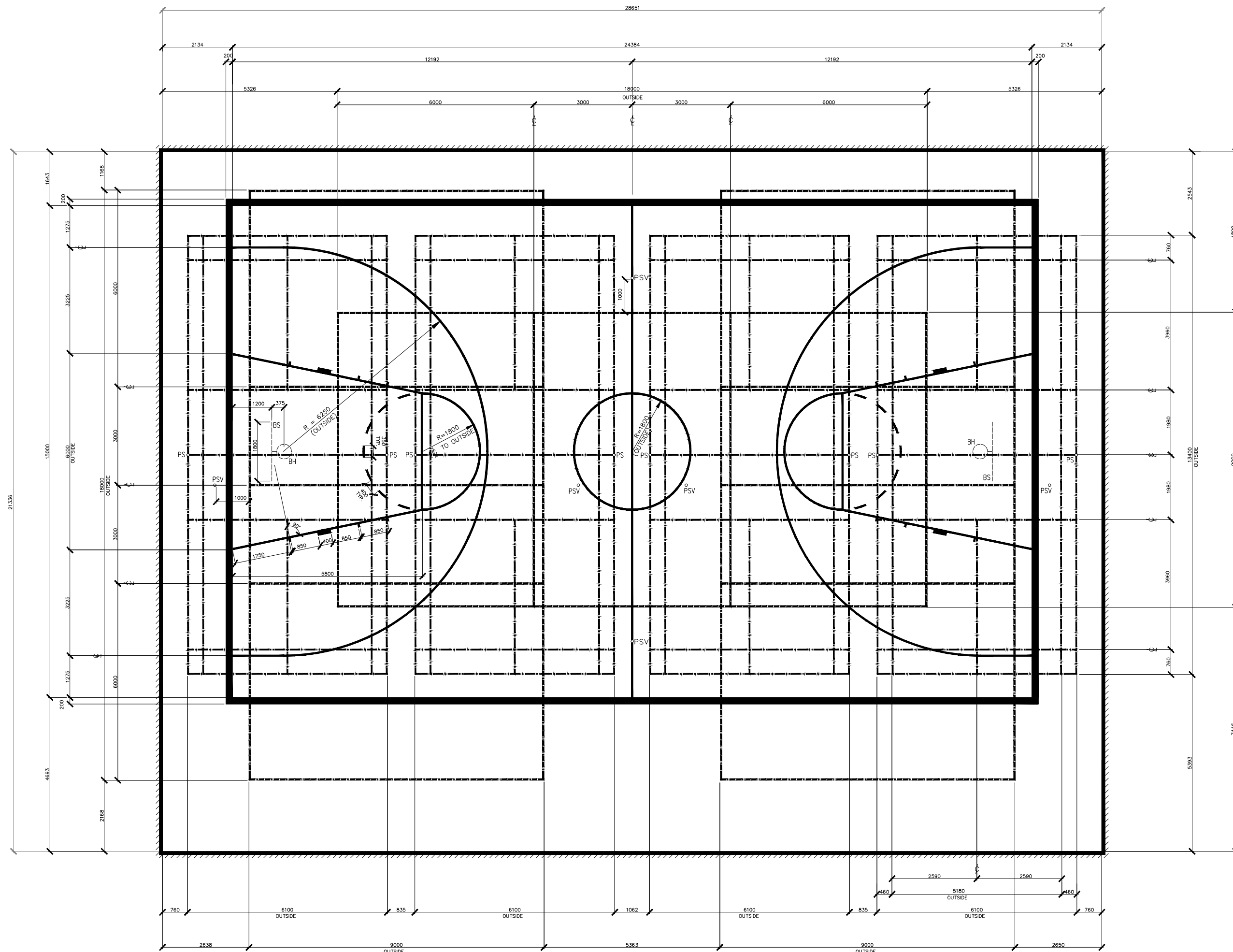
DRAWN BY	CHECKED	REVIEWED
jjj		

APPROVED	DEPT. APPROVAL
SEAL	SEAL

DEPT. PROJECT NO.	DRAWING NO.
	GL 2

CONSULTANT'S NO.	TENDER NO.

KEY PLAN



1 TWO PIECE FLOATING POLE SOCKET DETAIL
GYM SCALE: N.T.S.

LINE LEGEND:

COLOUR	SYMBOL	DESCRIPTION	WIDTH
BLACK	—	BASKETBALL COURT PAINT THIS COURT FIRST.	50 WIDE SOLID LINES EXCEPT 200 WIDE AT PERIMETER
RED	—	VOLLEYBALL COURT (MAIN COURT)	50 WIDE SOLID LINES
BLUE	—	VOLLEYBALL COURT (CROSS COURT)	50 WIDE SOLID LINES
WHITE	—	BADMINTON COURT	40 WIDE SOLID LINES

NOTE: WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES.
PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:
1. BASKETBALL.
2. VOLLEYBALL (MAIN COURT)
3. VOLLEYBALL (CROSS COURT)
4. BADMINTON.

LEGEND:

PSV	POLE SOCKET - VOLLEYBALL
PS	POLE SOCKET - BADMINTON
BH	BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.] TO TOP OF HOOP
BS	BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP

NOTES:

- NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
- BADMINTON POLE SOCKETS ARE TO BE CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT
- VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
- REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
- COURT SIDELINE CLEARANCES ASSUME CLEAR AREA OF OVERALL DIMENSIONS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

REVISIONS	DATE
A	
B	

A - Detail No.
B - Drawing No.

PROJECT
GYMNASIUM FLOOR LAYOUT

DRAWING
JUNIOR HIGH / MIDDLE GYM
SINGLE STATION
94'-0" X 70'-0"
6580 Sq. Ft.

SCALE
1 : 50
DATE
May 10 2001

DRAWN BY
CHECKED
REVIEWED

APPROVED
DEPT. APPROVAL

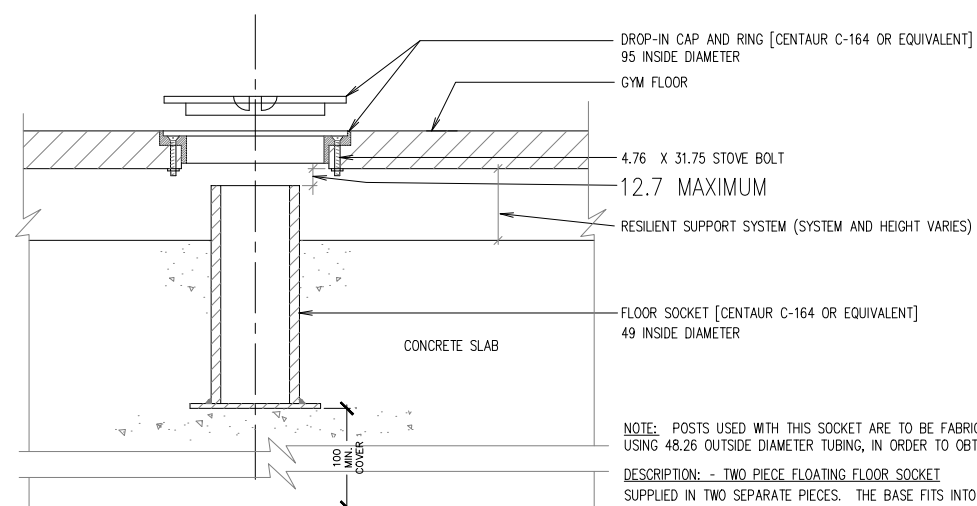
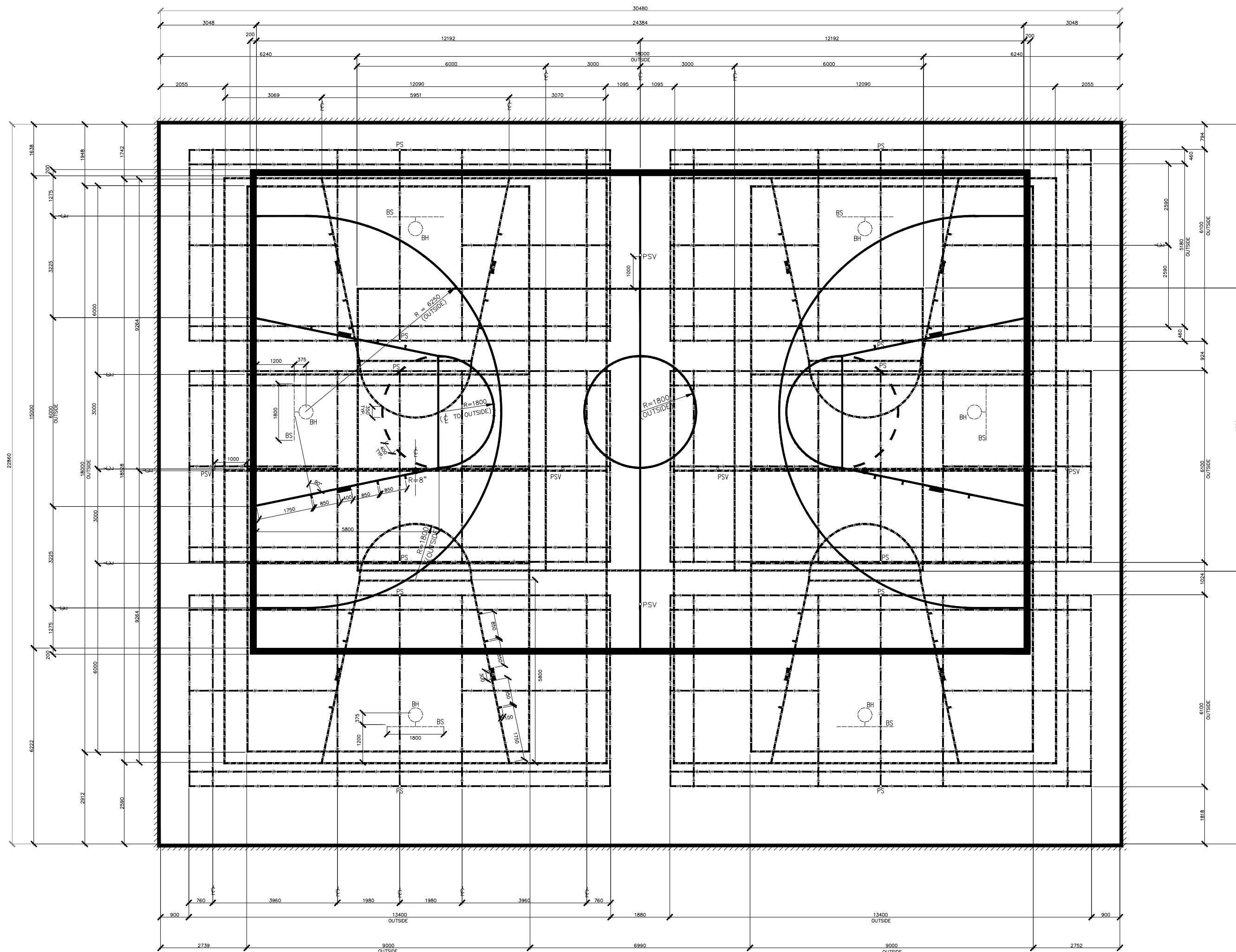
SEAL
SEAL

DEPT. PROJECT NO.
DRAWING NO.

CONSULTANT'S NO.
TENDER NO.

GL 3

KEY PLAN



1 TWO PIECE FLOATING POLE SOCKET DETAIL
GYM SCALE: N.T.S.

NOTE: POSTS USED WITH THIS SOCKET ARE TO BE FABRICATED USING 48.26 OUTSIDE DIAMETER TUBING, IN ORDER TO OBTAIN A CORRECT FIT.
DESCRIPTION: - TWO PIECE FLOATING FLOOR SOCKET SUPPLIED IN TWO SEPARATE PIECES. THE BASE FITS INTO THE CONCRETE SUB-FLOOR. A TOP RING DROP-IN PLATE FITS INTO THE FINISHED FLOOR, ALLOWING SUFFICIENT MOVEMENT OF THE FLOOR AND YET, LEAVING SPACE FOR THE POSTS TO FIT INTO THE SOCKET BELOW.

LINE LEGEND:

COLOUR	SYMBOL	DESCRIPTION	WIDTH
BLACK		BASKETBALL COURT PAINT THIS COURT FIRST.	50 WIDE SOLID LINES EXCEPT 200 WIDE AT PERIMETER
BLACK		BASKETBALL COURT CROSS COURT	50 WIDE LINES, SOLID AT PERIMETER, DASHED (127 DASH, 76 SPACE) AT KEYS
RED		VOLLEYBALL COURT (MAIN COURT)	50 WIDE SOLID LINES
BLUE		VOLLEYBALL COURT (CROSS COURT)	50 WIDE SOLID LINES
WHITE		BADMINTON COURT	40 WIDE SOLID LINES

NOTE: WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES.
PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:
1. BASKETBALL.
2. VOLLEYBALL (MAIN COURT)
3. BASKETBALL (CROSS COURT)
4. VOLLEYBALL (CROSS COURT)
5. BADMINTON.

LEGEND:

° PSV	POLE SOCKET - VOLLEYBALL
° PS	POLE SOCKET - BADMINTON
BH	BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.], TO TOP OF HOOP
BS	BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP

NOTES:

- NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
- BADMINTON POLE SOCKETS ARE TO BE CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT.
- VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
- REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
- COURT SIDELINE CLEARANCES ASSUME CLEAR AREA OF OVERALL DIMENSIONS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
- CENTER COURT SIDELINE CLEARANCES ASSUME FOLDING PARTITION WIDTH OF MAXIMUM 200 THICK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

REVISIONS DATE

A - Detail No.
B - Drawing No.

PROJECT
GYMNASIUM FLOOR LAYOUT

DRAWING
JUNIOR HIGH / MIDDLE GYM
DOUBLE STATION
100.00' X 75.00'
AREA = 7500 Sq. Ft.

SCALE DATE
1 : 50 May 10 2001

DRAWN BY CHECKED REVIEWED

APPROVED DEPT. APPROVAL

SEAL SEAL

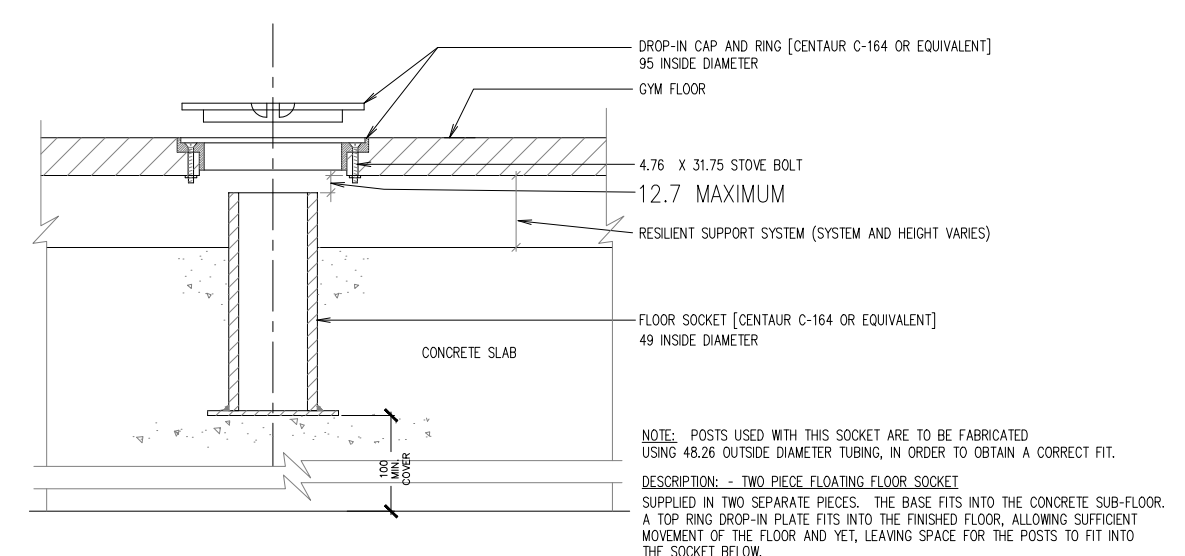
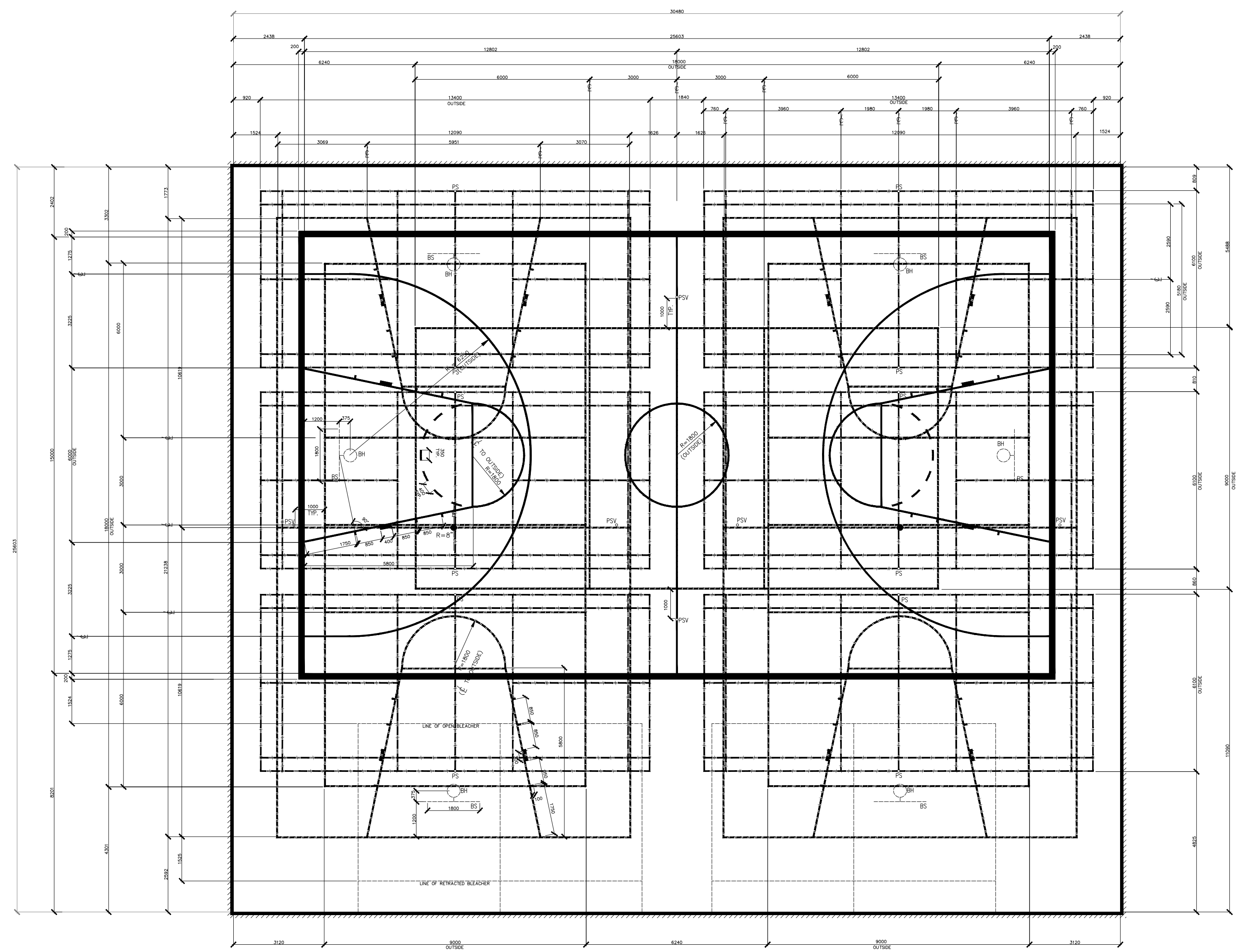
DEPT. PROJECT NO. DRAWING NO.

CONSULTANT'S NO.

TENDER NO.

GL 4

KEY PLAN



1 TWO PIECE FLOATING POLE SOCKET DETAIL
SCALE: N.T.S.

LINE LEGEND:

COLOUR	SYMBOL	DESCRIPTION	WIDTH
BLACK	—————	BASKETBALL COURT	PAIN 50 WIDE SOLID LINES EXCEPT 200 WIDE AT PERIMETER
BLACK	—————	PAINT THIS COURT FIRST.	
BLACK	—————	BASKETBALL COURT CROSS COURT	PAIN 50 WIDE LINES, SOLID AT PERIMETER, DASHED (127 DASH, 76 SPACE) AT KEYS
RED	—————	VOLLEYBALL COURT (MAIN COURT)	PAIN 50 WIDE SOLID LINES
BLUE	—————	VOLLEYBALL COURT (CROSS COURT)	PAIN 50 WIDE SOLID LINES
WHITE	—————	BADMINTON COURT	PAIN 40 WIDE SOLID LINES
	-----	LINE INDICATING EXTENT OF BLEACHERS	FOR INFORMATION ONLY - DO NOT PAINT

NOTE: WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES. PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:
 1. BASKETBALL,
 2. VOLLEYBALL (MAIN COURT)
 3. BASKETBALL (CROSS COURT)
 4. VOLLEYBALL (CROSS COURT)
 5. BADMINTON.

LEGEND:

°PSV	POLE SOCKET - VOLLEYBALL
°PS	POLE SOCKET - BADMINTON
BH	BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.], TO TOP OF HOOP
BS	BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP

- NOTES:**
- NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
 - BADMINTON POLE SOCKETS ARE TO BE LOCATED CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT.
 - VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
 - REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
 - COURT SIDELINE CLEARANCES ASSUME CLEAR AREA OF OVERALL DIMENSIONS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
 - CENTER COURT SIDELINE CLEARANCES ASSUME FOLDING PARTITION WIDTH OF MAXIMUM 200 THICK.
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
 - MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

REVISIONS	DATE
1	REVISE BADMINTON COURT DIMENSION 13 JULY 04

A	A - Detail No.
	B - Drawing No.

GYMNASIUM FLOOR LAYOUT

DRAWING
 SENIOR HIGH GYM
 SINGLE STATION
 100.00' X 84.00'
 AREA = 8400 Sq. Ft.

SCALE	DATE
1 : 50	May 10 2001

DRAWN BY	CHECKED	REVIEWED
jji		

APPROVED	DEPT. APPROVAL

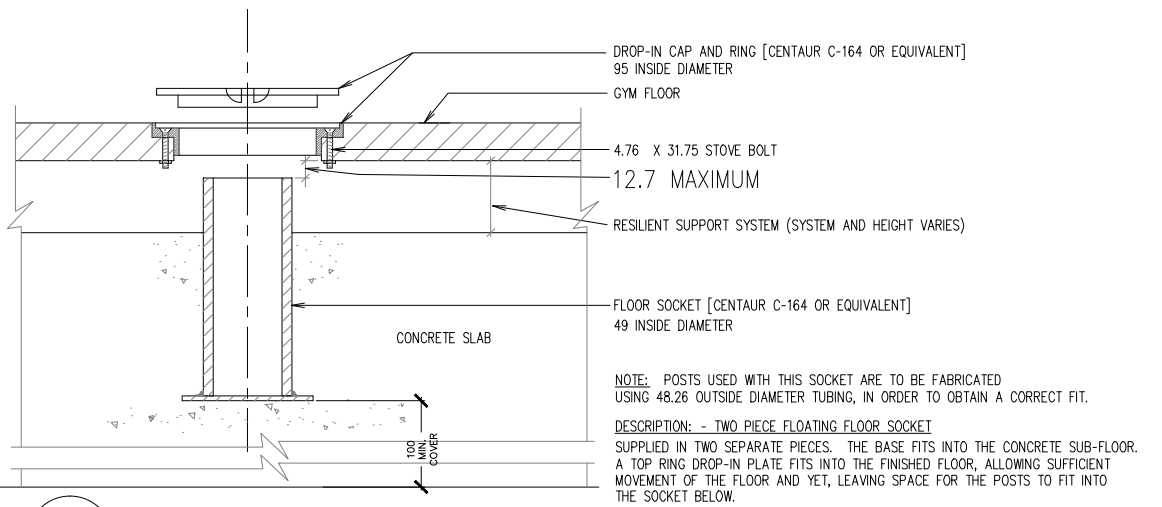
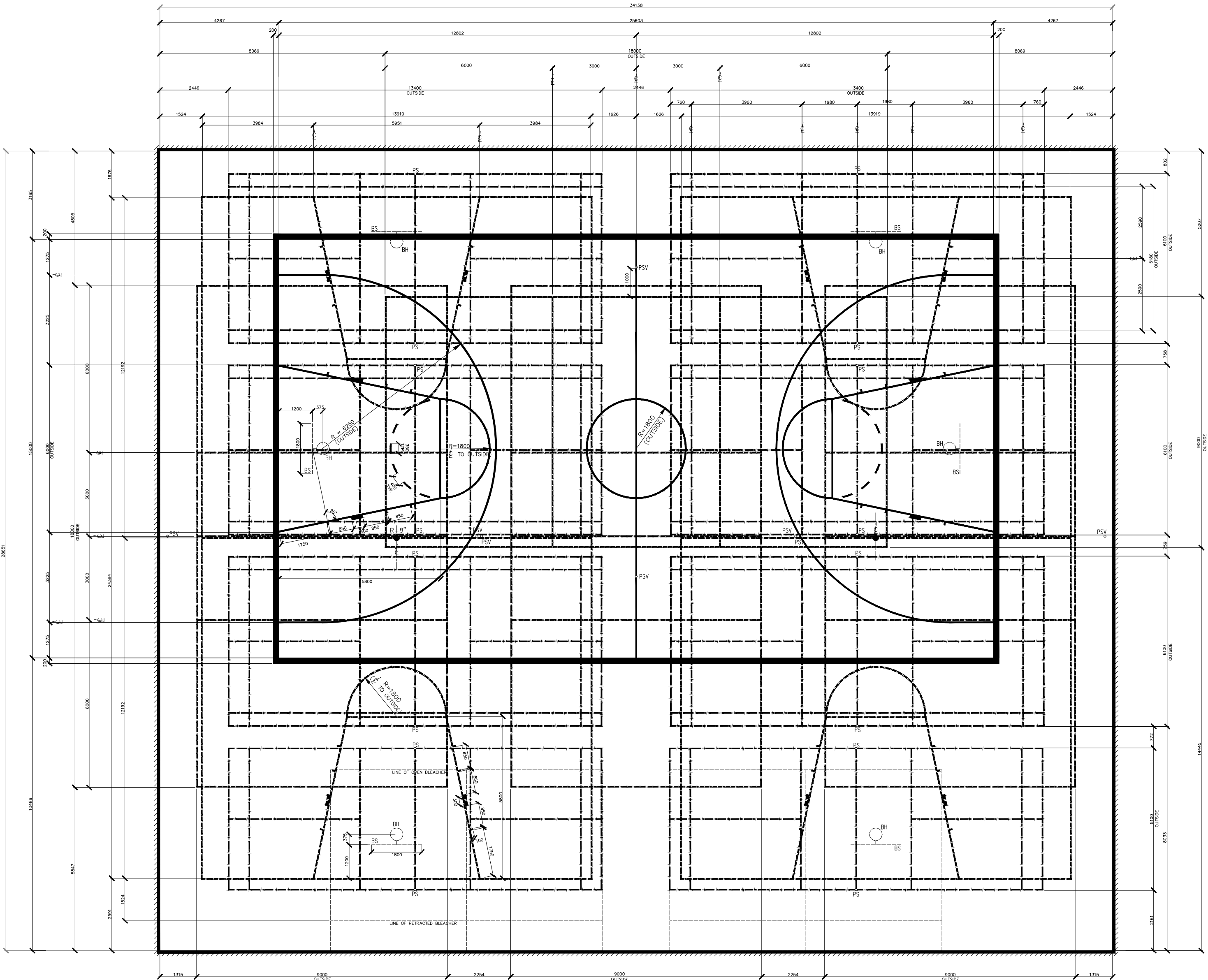
SEAL	SEAL

DEPT. PROJECT NO.	DRAWING NO.

CONSULTANT'S NO.	TENDER NO.

GL 5

KEY PLAN



- LEGEND:**
- PSV POLE SOCKET - VOLLEYBALL
 - PS POLE SOCKET - BADMINTON
 - BH BASKETBALL HOOP, 450 INSIDE DIAMETER MOUNTED AT 3050 ABOVE FINISHED FLOOR [A.F.F.] TO TOP OF HOOP.
 - BS BASKETBALL BACKSTOP, 1200 HIGH X 1800 WIDE, MOUNTED AT 2750 A.F.F. TO BOTTOM OF BACKSTOP

- NOTES:**
1. NOTE THAT DIMENSIONS MAY BE TO CENTERLINE OF COURT MARKING, OR TO OUTSIDE OF LINE AS INDICATED ON THE DRAWING.
 2. BADMINTON POLE SOCKETS ARE TO BE LOCATED CENTERED ON THE OUTSIDE LINE OF THE DOUBLE COURT.
 3. VOLLEYBALL POLE SOCKETS ARE TO BE SET MINIMUM 1000 OUTSIDE OF THE LINE OF THE COURT.
 4. REFER TO TWO PIECE FLOATING FLOOR SOCKET DETAIL FOR POLE SOCKET INSTALLATION CRITERIA.
 5. COURT SIDELINE CLEARANCES ASSUME CLEAR AREA OF OVERALL DIMENSIONS INDICATED ON PLAN WITH NO INTRUSIONS INTO THE SPACE.
 6. CENTER COURT SIDELINE CLEARANCES ASSUME FOLDING PARTITION WIDTH OF MAXIMUM 200 THICK.
 7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
 8. MINIMUM RUNOFF SPACE AT ENDS OF BASKETBALL COURT TO BE 1524.

- LINE LEGEND:**
- | COLOUR | SYMBOL | DESCRIPTION | WIDTH |
|--------|--------|---|---|
| BLACK | ————— | BASKETBALL COURT PART THIS COURT FIRST. | 50 WIDE SOLID LINES EXCEPT 200 WIDE AT PERIMETER |
| BLACK | ————— | BASKETBALL COURT CROSS COURT | 50 WIDE LINES, SOLID AT PERIMETER, DASHED (12 DASH, 76 SPACE) AT KEYS |
| RED | ————— | VOLLEYBALL COURT (MAIN COURT) | 50 WIDE SOLID LINES |
| BLUE | ————— | VOLLEYBALL COURT (CROSS COURT) | 50 WIDE SOLID LINES |
| WHITE | ————— | BADMINTON COURT | 40 WIDE SOLID LINES |
| | ----- | LINE INDICATING EXTENT OF BLEACHERS | FOR INFORMATION ONLY DO NOT PAINT |

- NOTE:** WHERE COURT LINES INTERSECT, LINES ARE TO BE GAPPED. DO NOT PAINT COURT LINES OVER OTHER COURT LINES. PRIORITY OF COURT LINES IS TO BE AS FOLLOWS:
1. BASKETBALL
 2. VOLLEYBALL (MAIN COURT)
 3. BASKETBALL (CROSS COURT)
 4. VOLLEYBALL (CROSS COURT)
 5. BADMINTON.

1	REVISE BADMINTON COURT DIMENSION	13 JULY 04
REVISIONS		DATE

A	A - Detail No.
	B - Drawing No.

PROJECT
GYMNASIUM FLOOR LAYOUT

DRAWING
SENIOR HIGH GYM
DOUBLE STATION
112.0' X 94.0'
AREA = 10528 Sq. Ft.

SCALE
1 : 50
DATE
May 10 2001

DRAWN BY	CHECKED	REVIEWED
jji		

APPROVED	DEPT. APPROVAL

SEAL	SEAL

DEPT. PROJECT NO. DRAWING NO.

CONSULTANT'S NO. TENDER NO.

GL 6