PROJECT DECRIPTION CONTINUED FROM SHEET 2

SITE DEVELOPMENT

AS SITING WILL VARY, THE BUILDING HAS BEEN DESIGNED SO THAT ORIENTATION CAN BE RELATIVELY FLEXIBLE. HOWEVER, WHEN POSSIBLE, LOCATING THE ENTRANCE DOORS AWAY FROM PREVAILING WINDS WILL HELP SAVE ENERGY DURING COLDER MONTHS IN NORTHERN CLIMATES. WINDBREAKS, TREES FOR SHADING AND PRESERVATION OF EXISTING LANDSCAPE SHOULD BE CONSIDERED IN SELECTING A SITE, DETERMING A LOCATION FOR THE BUILDING AND DESIGNING PARKING AREAS.

THE LEVEL OF THREAT IS DEFINED BY THE USER'S INSTALLATION/MACOM AND SHALL BE INCLUDED IN THE DESIGN CRITERIA AS GUIDANCE IN SELECTING SECURITY MEASURES APPROPRIATE TO THAT LEVEL OF THREAT.

ARCHITECTURAL DESIGN OBJECTIVES

THE DESIGN FOR THE FACILITY IS TO MEET CONSTRUCTION CRITERIA AS ESTABLISHED IN THE PROJECT CRITERIA PACKAGE. CONSTRUCTION TYPE, SUCH AS TYPE I OR TYPE II, INTERIOR FINISH REQUIREMENTS, FLAME-SPREAD AND SMOKE-DEVELOPED RATINGS SHALL ALL BE IN ACCORDANCE WITH THE APPROPRIATE PROJECT CRITERIA.

THE INTENDED USE OF THE CHAPEL FAMILY LIFE CENTER IS FOR THE ASSEMBLY OF MANY DIFFERENT SIZED GROUPS, FOR MANY DIFFERENT PURPOSES. ASSEMBLY GROUPS CAN RANGE IN SIZE FROM 20 PEOPLE UP TO 150 PEOPLE. NOTE THAT THE RAISED PLATFORM IS NOT INTENDED TO BE CONSTRUCTED WITH ALL THE FEATURES OF A TRUE STAGE, AND THAT THIS WILL FURTHER DEFINE THE OCCUPANCY PARAMETERS AFFECTING DESIGN REQUIREMENTS.

ACTIVITY CENTER

THIS SPACE IS DESIGNED TO PROVIDE FOR A MULTITUDE OF ACTIVITIES. HIGH LEVEL WINDOWS OR SKYLIGHT WILL ALLOW NATURAL LIGHT INTO THIS CORE ROOM, ALTHOUGH SINCE SOME ACTIVITIES MAY REQUIRE LOW LIGHT LEVELS SUCH LIGHT ENTRY DEVICES MUST ALSO INCLUDE FEATURES WHICH WILL ALLOW FOR THE CONTROL OF THE ENTERING LIGHT. THE FLOOR SURFACE WHICH WOULD BE MOST APPROPRIATE FOR THIS SPACE MAY VARY SOME FOR EACH INSTALLATION ACCORDING TO WHAT ACTIVITIES THEY EXPECT TO SERVE. CLEAR PATTERNS AND LARGE GRAPHICS ON A HARD SURFACE WORK WELL FOR ATHLETIC ACTIVITIES, WHILE STRONG VARIEGATED PATTERNS ON A SOFT SURFACE WORK WELL FOR GENERAL ASSEMBLY ACTIVITIES. IN ALL CASES THE FLOOR SURFACE SHOULD BE A VERY DURABLE PRODUCT SUCH AS VINYL TILE OR ATHLETIC TYPE CARPETING. IF CARPET IS SELECTED IT MUST BE SOLUTION DYED AND FEATURE AN APPROPRIATE PATTERN TO CONCEAL FOOD STAINS VERY SUCCESSFULLY. WALL SURFACES IN THIS SPACE ARE INTENDED TO BE OF PAINTED CONCRETE MASONRY UNITS EXCEPT THAT AREAS OF WALL SURFACE WILL NEED SPECIAL FINISHES TO PROPERLY CONTROL ACOOUSTICS. INDEED, ALL THE ACOUSTIC CHARACTERISTICS OF THE SPACE, IT'S SURFACES, AND IT'S FINISHES MUST BE CAREFULLY CONSIDERED ALONG WITH THE LIGHTING TO ACCOMMODATE THE WIDE RANGE OF ACTIVITIES BEING HOUSED. THESE ACTIVITIES MAY INCLUDE DINING EVENTS, LECTURES, THEATRICAL PRESENTATIONS, AND GAMES.

THE RAISED PLATFORM HAS BEEN ADDED TO ALLOW FOR GOOD SIGHT LINES DURING PRESENTATIONS. THE AREA BENEATH IT MAY BE USED FOR CHAIR AND TABLE STORAGE WHEN PROPERLY FIRE PROTECTED. A CONCEALED PROJECTION SCREEN IS TO BE INCLUDED AS PART OF THE DEVELOPED FACILITY.

A KITCHEN FACILITY HAS BEEN LOCATED ADJACENT TO THE ACTIVITY CENTER IN ORDER TO PROVIDE EASY ACCESS FOR FOOD SERVICE INTO THIS ROOM. NOTE HOW SWINGING DOORS ARE SHOWN BETWEEN THE KITCHEN AND THE ACTIVITY ROOM. THESE MAY BE PARTIAL OR FULL HEIGHT DOORS AND MAY ALSO VARY IN WIDTH. THEY ARE INTENDED TO ALLOW FOR FOOD TO BE SET UP ALONG THE COUNTER IN SERVING LINE FASHION SO THAT IT CAN BE REACHED BY PERSONS IN THE ACTIVITY ROOM. THE DETAILING OF THE BASE CABINETS, THE DOOR FEATURES, AND THE HARDWARE MUST ALL BE PROPERLY COORDINATED TO ACCOMMODATE THESE FUNCTIONS. SUCH COORDINATION SHALL INCLUDE THE PROVISION OF 180 DEGREE "WIDE THROW" TYPE HINGES (WITH EXTENDED LEAVES AND A HIGHER WIEGHT CAPACITY) AND A FINSHED BACKSIDE (DOOR FACING) TO THE BASE CABINETS. RESIDENTIAL-TYPE KITCHEN EQUIPMENT AND A COMMERCIAL EXHAUST HOOD SHALL GENERALLY BE PROVIDED, HOWEVER OTHER COMMERCIAL GRADE APPLIANCES CAN BE CONSIDERED WHERE DESIRED. SINCE COMMERCIAL GRADE EQUIPMENT IS USUALLY LARGER, INCLUDING MORE PIECES OF IT WILL REQUIRE CAREFUL PLANNING. TAKING SPACE AWAY FROM THE TWO PANTRIES OR OTHER AREAS IS NOT TO BE CONSIDERED WITHOUT SPECIFIC PERMISSION BEING GRANTED BY THE CHAPLAINCY HEADQUARTERS. JEOPARDIZING ONE FUNCTIONAL REQUIREMENT TO ACCOMPLISH ANOTHER IS A FALSE METHOD OF DESIGN AND IS TO BE COMPLETELY AVOIDED WHEN DEALING WITH THESE FACILITIES.

VESTIBULE

THIS IS THE MAIN ACCESS FOR PERSONS USING THE FACILITY. IT IS TO BE WARM, INVITING AND WELL LIT. A MAP OF THE BUILDING, BULLETIN BOARD AND DIRECTORY SHOULD BE LOCATED ON ONE WALL OF THIS SPACE. IMMEDIATE ACCESS IS AVAILABLE TO THE MAIN LOOP CORRIDOR THAT RUNS AROUND THE ACTIVITY CENTER. IN THE SCHEME B FAMILY LIFE CENTER, A RESOURCE CENTER AND RECEPTION/WAITING LOUNGE ARE LOCATED ADJACENT TO THE VESTIBULE. TOILET FACILITIES ARE ALSO LOCATED IMMEDIATELY ADJACENT TO THIS AREA. HARD SURFACES ON THE FLOORS AND WALLS SHOULD BE CONSIDERED FOR EASE OF MAINTENANCE AND DURABILITY.

ADMINISTRATION AREA

THIS HAS BEEN PLACED TO ALLOW FOR MONITORING THE MAIN ENTRANCE OF THE BUILDING. AS A GOOD DEAL OF COUNSELING WILL GO ON IN THE OFFICES, EASE OF ACCESS TO THE USERS IS IMPORTANT. OFFICE AREAS ARE TO BE CARPETED, HAVE GYPSUM WALLBOARD WALLS WITH VINYL WALL COVERING IN SOFT COLORS AND ACOUSTICAL PANEL CEILINGS WITH RECESSED LIGHTING. CEILING HEIGHTS WILL BE 2400 mm. GLASS PANELS IN THE DOORS OR GLASS SIDELIGHTS ARE TO BE INCLUDED IN EACH OFFICE. ADEQUATE BOOK SHELVING WITH ADJUSTABLE SHELVES AND COMFORTABLE SEATING ARE TO BE INCLUDED IN THESE ROOMS. A MINIMUM SHOUND TRANSMISSION CLASS (STC) RATING OF 52 SHALL BE PROVIDED BETWEEN ALL OFFICES.

FAMILY LIFE /PASTORAL CARE AREA (SCHEME B)

AS IN THE ADMINISTRATIVE AREA, THESE OFFICES ARE USED FOR COUNSELING. A SEPARATE ENTRANCE TO THIS AREA AND SEGREGATED WAITING AREA WILL PROVIDE SOME ANONYMITY TO THOSE COMING TO THIS PART OF THE BUILDING. OFFICES ARE TO BE CARPETED. WALLS ARE TO BE GYPSUM WALLBOARD WITH VINYL WALLCOVERING IN SOFT COLORS AND CEILINGS ARE TO BE ACOUSTICAL PANELS. SOUND TRANSMISSION BETWEEN THE WALLS OF THE OFFICES SHOULD BE CAREFULLY DESIGNED. A MINIMUM STC RATING OF 52 SHALL BE PROVIDED BETWEEN OFFICES.

A SMALL COFFEE BAR HAS BEEN INCLUDED IN THE COUNSELING AREA. THIS SHALL INCLUDE A SINK, UNDERCOUNTER REFRIGERATOR, BUILT-IN WASTE RECEPTACLE, AND UPPER AND LOWER CABINETS WITH ADJUSTABLE SHELVES. THE UPPER CABINETS SHALL BE HIGH ENOUGH TO ALLOW FOR LARGE COFFEE POTS ON THE COUNTER BELOW.

COMMUNITY ACTIVITIES AREA

THESE SPACES WILL PROVIDE FOR A VARIETY OF ACTIVITIES WITHIN THE OVERALL BUILDING. BESIDES BEING USED FOR EDUCATION, CLASSROOMS MAY BE DEDICATED TO CRAFTS WHEN EQUIPPED WITH SINK AND HARD FLOORING MATERIALS. ADDITIONAL STORAGE SHOULD BE ADDED TO THESE SPACES WHEN SPECIFIC COMMUNITY ACTIVITIES ARE KNOWN AND THEIR STORAGE NEEDS CAN BE ANTICIPATED.

CEILING HEIGHTS IN THESE CLASSROOM SPACES SHOULD BE A MINIMUM OF 2700mm. NATURAL DAYLIGHT WILL BE PROVIDED THROUGH WINDOWS ALONG THE PERIMETER WALL OF THE FACILITY. SOME CLASSROOMS WILL NEED SPECIAL NATURAL LIGHT CONTROLLING FEATURES. PAINTED CONCRETE MASONRY UNITS, CARPET AND ACOUSTICAL PANEL CEILINGS WITH APPROPRIATE LIGHT FIXTURES WILL BE THE TYPICAL FINISH MATERIALS.

RELIGIOUS EDUCATION

THESE CLASSROOMS VARY IN SIZE FROM 15 TO 30 SQUARE METERS. ADDITIONAL FLEXIBILITY MAY BE GIVEN TO THESE SPACES BY ADDING A FOLDING WALL BETWEEN TWO CLASSROOMS. WHILE IT HAS BEEN NOTED THAT THE MAJORITY OF RELIGIOUS EDUCATION CLASSES INCLUDE FROM SIX TO EIGHT PERSONS, AS MULTIPLE CLASSES COME TOGETHER FOR SPECIAL EVENTS, THE LARGER CLASSROOMS BECOME VERY NECESSARY. VARIOUS SIZED CLASSROOMS HAVE BEEN DISTRIBUTED AROUND THE BUILDING SO THAT THEY ARE MORE READILY SHARED BETWEEN ACTIVITIES. CAREFUL SCHEDULING OF THE USE OF THE BUILDING IS IMPORTANT IN ORDER TO PROVIDE ACCESS TO ALL THOSE WHO WISH TO USE THE FACILITY. A MINIMUM STC RATING OF 45 SHALL BE PROVIDED BETWEEN CLASSROOMS AND BETWEEN CLASSROOMS AND THE CORRIDORS.

SUPPORT FACILITIES

DISTRIBUTED THROUGH THE BUILDING ARE STORAGE CLOSETS, JANITOR CLOSETS, AND TOILETS. TOILET ROOMS SHALL HAVE CERAMIC TILE FLOORS AND WALLS, MOISTURE-RESISTANT CEILING TILES AND APPROPRIATE LIGHTING. ALL TOILET ROOMS ARE TO MEET THE REQUIREMENTS FOR HANDICAPPED PERSON ACCESSIBILITY PER THE PROJECT CRITERIA PACKAGE. THE NUMBER OF FIXTURES SHALL BE IN CONFORMANCE WITH CRITERIA. ADEQUATE EXHAUST FANS AND FLOOR DRAINS ARE TO BE INCLUDED. FINISHES OF THE OTHER SUPPORT FACILITIES WILL FOLLOW MILITARY STANDARDS SO THAT THEY ARE DURABLE AND EASY TO MAINTAIN. JANITOR CLOSETS LOCATED WITHIN THE FACILITY WILL BE EQUIPPED WITH A FLOOR-MOUNTED MOP SINK AND STORAGE SHELVING. BOTH VERSIONS OF THIS FACILITY TYPE ARE LARGE ENOUGH THAT AN INTERIOR LADDER TO A ROOF HATCHWAY SHALL BE PROVIDED IN A SMALL EQUIPMENT ROOM OR JANITORS CLOSET. THE ROOF ARTICULATION IS GREAT ENOUGH THAT MORE THAN ONE LOCATION WILL PROBABLY BE REQUIRED. PROVIDE STEEL POSTS WITH RESILIENTS STOPS AND KEEPERS, SET IN CONCRETE, AT THE EQUIPMENT ROOM AND STORAGE DOORS WHICH ARE ENTERED DIRECTLY FROM THE EXTERIOR OF THE BUILDING. THIS IS NECESSARY TO KEEP THEM FROM BEING DAMAGED FROM BLASTS OF WIND WHEN UNLOCKED OR LATCHED FOR ROOM ACCESS.

SYSTEM DESIGN OBJECTIVES

STRUCTURAL

THE MAIN STRUCTURAL FRAME FOR THE BUILDING WOULD MOST LIKELY CONSIST OF A CAST-IN-PLACE CONCRETE FOUNDATION, STRUCTURAL STEEL SKELETON, OPEN WEB JOIST, STEEL ROOF DECK AND A SUSPENDED CEILING.

THE ACTIVITY CENTER COULD BE FRAMED IN A SIMILAR FASHION TO THE REST OF THE BUILDING. OTHER NON-COMBUSTIBLE STRUCTURAL SYSTEMS MAY BE USED WHICH MEET THE REQUIREMENTS OF THE CRITERIA PROVIDED WITH EACH SPECIFIC PROJECT. THE USE OF GLUE-LAMINATED TIMBER, HEAVY TIMBER, AND OTHER OPTIONAL MATERIALS SHALL BE ACCORDING TO THE PROJECT CRITERIA PACKAGE.

PAINTED EXPOSED TRUSSES AND ACOUSTICAL ROOF DECK MAY BE LEFT EXPOSED IN THE ACTIVITY CENTER THEREBY INCREASING THE APPARENT VOLUME OF THE ROOM. THIS WOULD NEED TO BE DONE VERY CAREFULLY SO THAT THE FINISHED PRODUCT HAD A "COMPLETED" APPEARANCE. IN THIS CASE, LIGHT FIXTURES, MECHANICAL EQUIPMENT AND OTHER SERVICE ELEMENTS WOULD NEED TO BE CONCEALED FROM VIEW OR CAREFULLY ARRANGED AND PAINTED. FLOOR SLAB THROUGHOUT THE BUILDING SHOULD BE AN APPROPRIATE THICKNESS OF CONCRETE SLAB WITH GRANULAR FILL MATERIAL BENEATH IT.

EXTERIOR WALLS MAY BE MADE UP OF BRICK VENEER, INSULATION AND CONCRETE BLOCK; STEEL FRAME WITH METAL STUD INFILL OR CONCRETE BLOCK WITH AN EXTERIOR INSULATION AND FINISH SYSTEM; OR CONCRETE BLOCK WITH INSULATION AND EXTERIOR DECORATIVE CONCRETE BLOCK. IN ALL CASES, APPROPRIATE LEVELS OF INSULATION ARE TO BE USED TO INSURE THERMAL PROTECTION AT CRITERIA LEVELS.

THE STRUCTURAL DESIGN SHALL MEET THE REQUIREMENTS OF THE PROJECT CRITERIA PACKAGE. STRUCTURAL SYSTEMS ARE ALSO TO ACCOMMODATE THE NEED FOR THREAT PROTECTION MEASURE AS DEFINED BY PROJECT CRITERIA.

MECHANICAL

GEOGRAPHIC LOCATION AND CLIMATE SHALL DETERMINE THE BASIC REQUIREMENTS FOR HEATING AND COOLING. SELECTION OF ENERGY SOURCES FOR HEATING AND COOLING SHALL BE BASED ON LOCAL AVAILABILITY, FIRST COST AND LIFE CYCLE COST.

REQUIREMENTS FOR HEATING, VENTILATION AND AIR CONDITIONING (HVAC) SYSTEM SHALL BE DETERMINED BY THE CRITERIA PACKAGE PROVIDED FOR EACH SPECIFIC PROJECT.

BOTH FIRST COST AND LIFE CYCLE COST SHALL BE CONSIDERED IN SELECTING THE MOST APPROPRIATE HAVC SYSTEM. ANNUAL ENERGY USE FOR THE FACILITY SHALL MEET THE PROVIDED ENERGY BUDGET REQUIREMENTS AND GIVEN WEATHER DATA.

ALL MECHANICAL SYSTEMS, INCLUDING DUCTWORK, GRILLES AND DIFFUSERS, SHOULD BE AS WELL CONCEALED AS POSSIBLE. THERMOSTATS AND OTHER CONTROLS, WHILE ACCESSIBLE TO THE STAFF, ARE TO BE PROVIDED WITH LOCKABLE COVERS AND LOCATED OUT OF "PUBLIC" VIEW. ZONED TEMPERATURE CONTROL SHOULD AT A MINIMUM BE PROVIDED IN THE ACTIVITY CENTER/ KITCHEN, ADMINISTRATIVE AREA, FAMLY LIFE/PASTORAL CARE AREA, COMMUNITY ACTIVITIES AREA AND CLASSROOMS. ADEQUATE EXHAUST WILL BE NECESSARY IN THE TOILETS, KITCHEN AND SERVICE CLOSETS. NOISE CONTROL MUST BE PROVIDED IN ALL THESE SPACES. MECHANICAL/ELECTRICAL ROOMS ARE NOT TO BE USED FOR ANY OTHER PURPOSES UNLESS AGREED TO BY THE APPROPRIATE MECHANICAL/ELECTRICAL DESIGNERS.

IF ADDITIONAL SPACE FOR MECHANICAL EQUIPMENT IS REQUIRED, MEZZANINE ABOVE THE LARGE CLASSROOMS IS ALLOWABLE. THE ARCHITECTURAL DESIGNER SHALL COORDINATE, EARLY IN THE DESIGN PROCESS TO ENSURE THAT SUFFICIENT CONCEALED SPACE IS PROVIDED IN WALLS AND ABOVE CEILINGS IN ORDER THAT THE HVAC DESIGNER MAY PROPERLY DESIGN A QUIET AND EVENLY DISTRIBUTED SUPPLY AND RETURN DUCTWORK SYSTEM. THE DUCTWORK SHALL BE LOCATED IN CONCEALED SPACES WHERE TRANSMISSION NOISE WILL NOT BE OBJECTIONABLE.

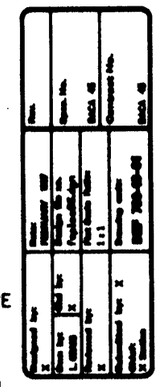
ACOUSTICS IS AN IMPORTANT CONSIDERATION IN THE DESIGN OF THE FAMILY LIFE CENTER. THE DESIGNER SHALL MAKE EVERY EFFORT TO ENSURE THAT AN NC RATING OF 25 OR LESS IS ACHIEVED IN ALL OCCUPIED SPACES OF THE BUILDING. CONSIDERATION SHALL BE GIVEN TO AIR VELOCITY THROUGH DUCTS AND DIFFUSERS, DUCT-SIZING PROCEDURES, TYPES OF TURNS AND FITTINGS; DUCT LINING AND SOUND ATTENUATORS AND THE RECOMMENDATIONS OF ASHRAE, SMACNA, AND OTHER APPLICABLE CRITERIA.

ALL EXTERIOR ON-GRADE MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE LOCATED WITHIN AN ENCLOSED AREA.

AN ENERGY MANAGEMENT SYSTEM WITH OVERRIDE CAPACITY ACCESSIBLE TO THE USER SHALL BE PROVIDED. THE POSSIBLE REQUIREMENT FOR A FUTURE CONNECTION TO A BASEWIDE EMCS SHALL BE INVESTIGATED, AND APPROPRIATE PROVISIONS MADE, IN ACCORDANCE WITH CEGS 13814 AND THE PROJECT CRITERIA PACKAGE.

CONTINUED ON SHEET 7

US Army Corps of Engineers Omaha District



DEPARTMENT OF THE ARMY
FAMILY LIFE CENTER
PROJECT DESCRIPTION

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