

Arch 5672 Historic Building Conservation  
Assignment 7: Final Recommendations and semi-final documentation  
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#### Organization of the report:

I will primarily focus on the doors in the Boys/Kindergarten room and the Northwest stairs, but with the rest of my group I have also surveyed the windows and floors in these areas and we briefly touch upon dividers in the new addition of the church.

Following this report is a page of pictures illustrating specific aspect of door repair and refinishing that my recommendations touch upon. After that is a map that shows Openings 1-17. Windows and doors were number successively as openings 1-24. Openings 18 - 24 can be found on the stairs, rising in number from the bottom to the top. Opening 18 is the set of double doors that are an entrance to Knox. Opening 19 is the stained glass window above 18. Assuming that the entrance faces North, Opening 20 is the set of two windows to the west of the 18. Opening 21 is a set of three stained glass windows about 20 that extend up the next level on the west wall. Opening 22 is a set of 3 stained class windows on the intermediate level of the north wall. Opening 23 is the door on this landing. Opening 24 is a set of three small stained glass windows above 20 on the West Wall.

Individual evaluations for each opening follow the map and there are five more illustrative pictures interspersed throughout them.

After that are evaluations we did for the floors in the Boys/Kindergarten room and Northwest stair areas.

#### Door Repair and Refinishing

The materials involved in this report are wood (the door itself) and metal (the hinges). I'll also briefly discuss how a canvass and laminate door in our section relates to the new addition.

After taking samples from Openings 10 and 11, we have decided that all of the doors in our section should be refinishing in order to return them to their original color. However, most of the doors are in pretty good shape, so if funding is not available for restaining, the refinishing can probably wait.

We think dye concentrates could be the easiest way to match the color of the new stain to the old, but before this can be done, the doors must be stripped. In order to strip the doors, the stain will have to be removed, either with chemical strippers or by sanding. All of the current stain has to be taken off the wood, and if they are chemically stripped, the wood should still be sanded in order to be prepared for staining. Sanding can be done with an electric rotary sander, or by hand. It might be better to sand by hand at the end to ensure that the surface is smooth, without any large scratches from the power sander. Almost paint or varnish remover should work to remove the stain on these doors, as long as it is gentle and use and safety instructions are followed.

After the stain is removed, the scratches and dents can be repaired or filled. It might be possible to sand away the shallowest scratches. Deep or large gouges can be filled with wood putty, which will take the color of the stain used on the rest of the door. Dents can be removed by either using alcohol or water. For alcohol, put a couple of drops of alcohol on the dent, and light with a match. Or place a couple of

drops of water on the dent, cover with a damp cloth and iron until the dent is removed.

I also recommend trying to replicate the original hinges. Opening 17 (pictured) and opening 18 are the only doors we've found that still retain their original hinge, but the ghost of the above door hinges can be found on the rest of the doors (see detail of 10). The hinges of Openings 17 and 18 (detail) could be used to replicate hinges for the others. Most of the doors still have their old handles, but they need to be cleaned. Opening 10 is not equipped with its original handle; instead it has a piece of new anodized brass hardware (see detail). After these handles have been removed, appropriate pieces could be replicated from Opening 17 (see detail).

Whether or not new handles are replaced with period replications, a program of regular maintenance on all doors should be initiated. This can be accomplished by wiping down the hardware with a cloth dampened with mineral spirits or a denatured alcohol on a regular basis. Other steps that should be taken while cleaning include: 1) remove dust with a cleaning cloth; 2) checking screw or fasteners to make sure they are tight and not loose; 3) making sure all moving parts are operable and lubricated lightly.

#### Further Recommendations

An original wall between the Boys' room and kindergarten was removed sometime during the building's history to create one big room. I do not recommend rebuilding this wall and replacing the door in it, as the change appears necessary for the building's modern uses.

In Opening 8 (see photograph), the original door has been removed and a collapsible screen has been installed in its place. I do recommend reversing this change, as the Pella model folding screen is in pretty bad shape. If there are any old doors in storage in the church, one might fit this opening, otherwise, a new door should be made or ordered. The other option is to leave the closet without a door, which would be fine considering it essentially has none right now. If a new door is found or made, it will have to be refinished to match the others. In either case, I recommend installing shelves or other storage units in this area behind opening 8 in order to meet the building's present day requirements (and so things can be stored in a way other than piling it on the floor).

The screen in opening 8 was probably installed around the same time as the addition to Knox. There are two different models of partition, differentiated by their door handles (see details). Most of the screen have been folded for so long that they only retain their original color in the folds, but have faded otherwise. As it appears that most of these dividers aren't used (and haven't been for a long time) we recommend removing most of them. The ones that are retained should be repaired as much as possible. If any need to be replaced, Home Depot or Lowe's might be able to order new doors from Panelfold®, the company that made the originals.

My recommendations are based upon a best case scenario, where it is assumed that there is enough money to carry them out. If funding is not available, none of the doors discussed in this report are in such bad shape that they can't be kept as they are (with regular maintenance) for a few years.

Summary of recommendations made by the team as a whole (these are gone into in more detail in the reports by individual team members):

#### Ceilings:

The ceilings in the boys / kindergarten (B/K) room, the coat room (behind opening 8), and the ladies toilet (behind opening 12) have a few cracks which could easily be repaired with plaster. There are several large cracks in the ceiling of the corridor, so this ceiling should be redone.

On the stairs, the ceiling cracks are again small, so touching up with plaster should be enough. The second floor ceiling (above the top section of the stairs) has quite a few cracks in it, so it also should be redone.

#### Floors:

In all of the basement areas (B/K room, coat room, ladies toilet, and the corridor), the flooring has been replaced with linoleum and carpet. This should be removed. If the wood floor underneath is in reasonably good condition, then it should be cleaned and refinished. If it is not, then a toned down tile that is more appropriate to the room than the current linoleum should be installed.

On the stairs, rubber treading has been installed for safety reasons. This is now worn down and much of the wood around the edges is scratched. This rubber treading should be removed and the visible parts of the floor should be repaired and refinished. Then new treading should be installed.

The top two sections of the stairs (leading up the balcony) are still exposed wood with no rubber treading. This wood is very scratched and worn in some places. As the area of balcony this stair leads to is no longer used (except for storage), its repair is probably not all that necessary, but if there is money, the top section of the stairs should be cleaned, repaired, and refinished.

#### Walls:

The walls of Boy's/Kindergarten room, coat closet, ladies closet, corridor, and Northwest stairs have all been painted a white color.

The walls in the Boy's room/Kindergarten are in fair condition. There are light cracks at the corners of the windows and many of the walls are spotted areas with light smudges of dirt. There are also areas of the walls by the doors that have noticeable dirty stains of red paint. In the area of the corridor and the stairs, the walls are in fair to good condition.

As the boys/kindergarten room (and the little coat room off of it) have the walls with the most damage, we recommend that they be taken care of first. We recommend taking chips of paint from the walls to determine what their original color was and then repainting this area accordingly.

The areas of light cracking by the window should be treated by sanding off the paint over/along the cracks, filling the cracks, and then priming and repainting.

For the rest of the walls in our area of evaluation, we recommend that they be cleaned to remove any dirt, streaks, or smudges, but they do not require repainting. If there is enough money, they could be repainted once chips have been taken to determine the original wall color of the ladies toilet, corridor, and northwest stairs.

#### Windows:

Generally speaking, all the windows are in rather good, functional condition at this time. Exterior conditions should be checked, however, because they may need to be resealed. Interior sections of caulking and weather sealing on all the windows appear to be in good condition.

The stained glass windows in the upper stairwell are all in quite good condition, although they are mostly out of reach of a proper inspection, both inside and outside. All the leading and panes of these windows are in good condition, with no notable cracked or loose pieces. These windows have not sustained the damage and warping as some of the other windows in the building. They should all be looked at more closely, however, just to make sure. Judging by our observations, none of the windows need any major repairs, but they should be removed for closer inspection and through leaning.

The stained glass window above the northwest entrance is also in pretty good repair. None of the glazing is damaged or loose. All it really needs is a good cleaning and a closer look at the outside conditions to make sure the weather sealants are in good shape. The head of the frame above the window does have some white paint on it which should be removed if possible.

All of the other windows in the section are clear, double-hung windows and are in quite good shape. The windows on the stairwell are mostly obstructed, but seem in good condition. The window in the ladies room is in more pertinent need of repair, since the lower pane is cracked. The pane should be replaced to match the windows in the boys room. The paint should be stripped from the frame, sill and hardware as well.

As far as the boys room windows go, they may all need to be replaced in order to get the textured parts to match. If the textured glaze is some sort of film that has been stuck to the windows; it should be removed and replaced if possible. All of the frames and hardware are in good working condition with little or no damage.

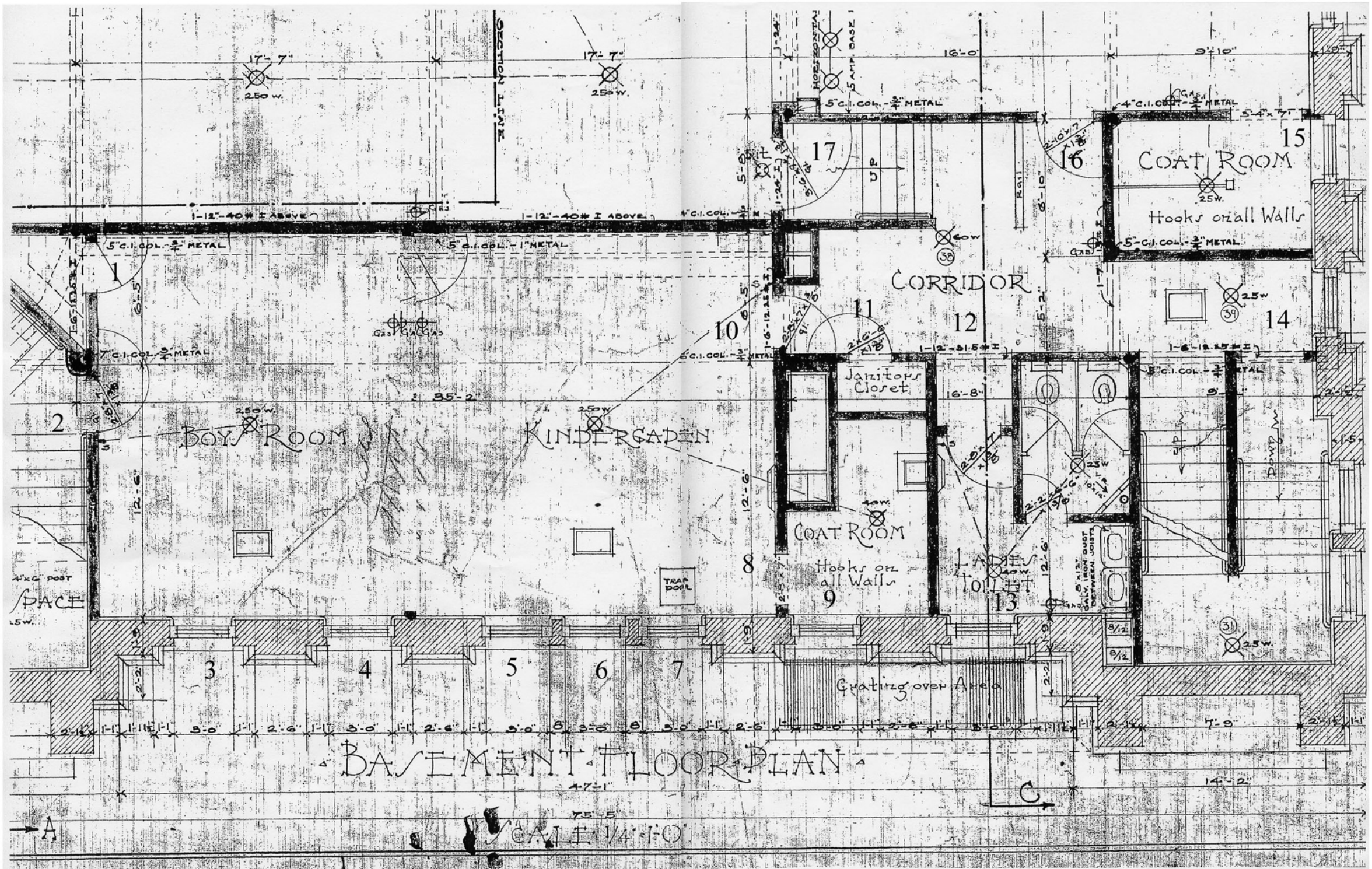
#### Bibliography:

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Marlow, A.W., adapted by Frederick Oughton, *The Complete Manual of Wood Finishing*, Stein and Day Publishers, Briarcliff Manor, NY, 1983.

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BASEMENT FLOOR PLAN

SCALE 1/4" = 1'-0"





Left: Opening 17, which still has old handle and hinge



Middle and right: close up of old handle and hinge that we want to replicate



Left above: Opening 10



Middle and Right: close up on new handle, which want to replace, and the hinge ghost, showing where 10 used to have a hinge like 17

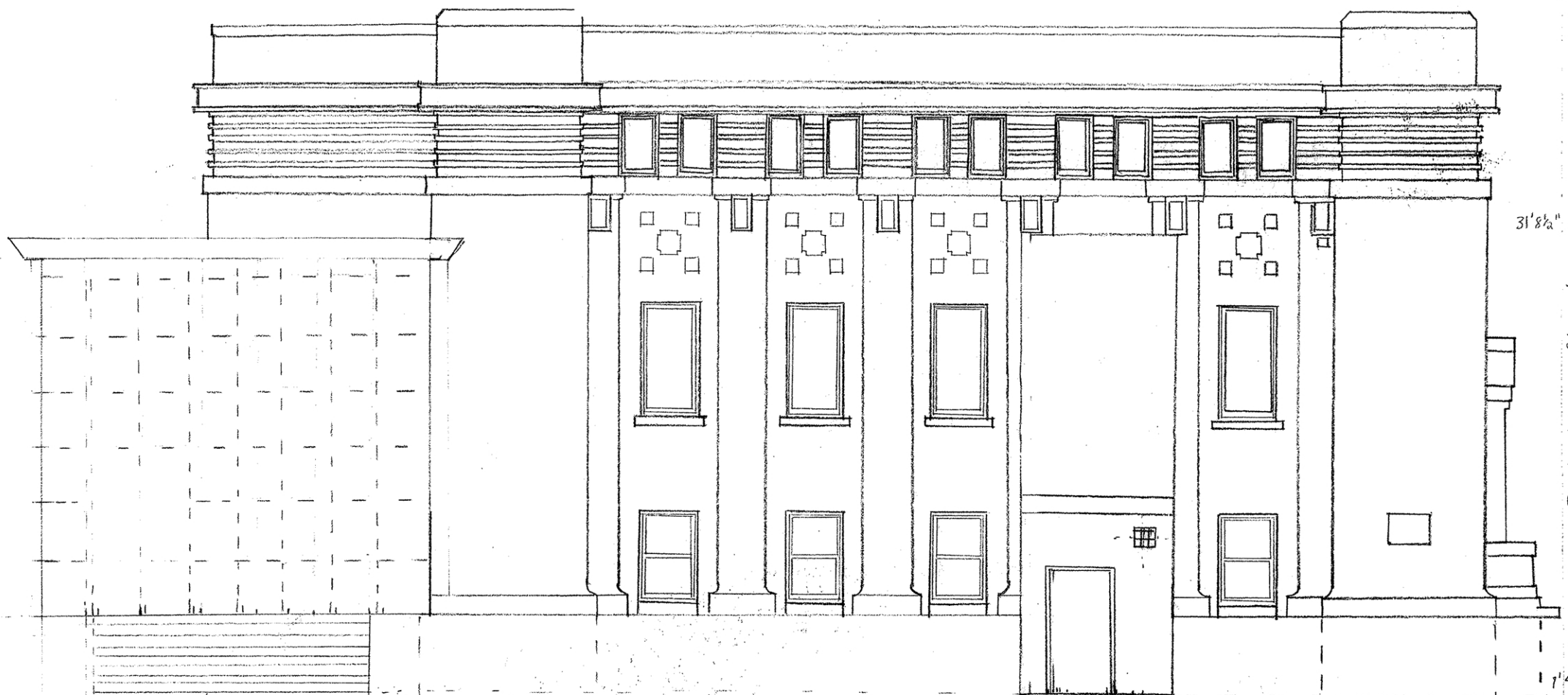
Middle and Right (below): Close ups of the two types of handles on the dividers in the new addition; this dividers are similar to the one in opening 8



Left below: opening 8, where door has been replaced with a divider



East Elevation  
on Asbury St.  
Preliminary Drawing



31' 8 1/2"

Knox's Presbyterian Church  
1536 West Minnehaha Avenue  
St. Paul, Ramsey County, Minnesota

20' 6 1/4"

12'

788 1/2"  
96"

3'	3'	3'	3'	3'	8' 10"	3'	8'	8'
30"	30"	30"	30"	30"	9"	5' 2"	5' 2"	2' 8"
117.5"	62"	179.5"	284.5"	62"	279.5"	303.5"	372.5"	106"
478.5"	446.5"	533.5"	580"	96"	32"	708"		

676" = 56' 4"

48' 4"

Scale = 1/4" = 1' 0"

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