RENE MUGNIER ASSOCIATES, INC.
STRUCTURAL ENGINEERS

777 CONCORD AVE., SUITE 201 CAMBRIDGE, MA 02138-1053 PHONE (617) 547-7773 FAX (617) 547-7743

April 30, 2012

Mr. Jerry Connelly
1859 Dorchester Avenue
Dorchester, MA 02124

RE: 131 Eliot Street, Milton, MA

Dear Mr. Connelly:

This report documents our observations made on April 18 & April 20, 2012 during our visits to the referenced address.

This report is based on our observations, qualifications, and information provided to us during this visit. It does not claim to be an itemization of all structural problems, and is intended only to provide the client with a general idea of the typical structural concerning problems observed during the walk-through inspection.

For the purposes of clarity and orientation, the left, right, front, and back relate to the observation of the building from the street looking at the front of the building.

Some pictures appear less dramatic than the description. They often do not reflect the importance of the damages but must be used for location. We recommend that the report be read while visiting the site with the pictures taken during our site visit to better understand the conditions. See pictures #1 through

All the following observations and recommendations relate only to structural items and are the result of a visual walk-through.

OBSERVATIONS AND RECOMMENDATIONS

The purpose of the visits was to make a couple of walk-throughs to get an idea of the structure of this building and to give our opinion on the feasibility to rehabilitate the building.

We started by looking at the left portion of the building from Eliot Street and noticed that this is a partially brick, wood, and concrete building, which is two stories high. There is a brick façade which is partially covered with wood on the top. The brick façade on the second floor is covered with wood protruding outside of the façade. See picture #2A.

We understand your intent would be to remove the protruding wood portion of the building which does not appear to be structural.

Some partial repointing will be needed on the bricks. There is also some repair of the concrete needed at the base. See picture #3A showing the rebar.

Walking more to the left of Eliot Street at the end of the building we noticed a loading dock. There is some necessary work to be done on the concrete. See pictures #5A and 6A.

We then proceeded to look at the elevation on Central Street. See picture #8 showing the concrete column in the front.

We could see that the wood façade above has been damaged by water. See picture #9A. We did not have access to the parking lot underneath which is built of concrete columns and concrete beams. See next visit below.

There is a very long façade facing the railway. See picture #10A.

Bay windows are protruding from the façade. These bay windows are in very bad condition as one could see on pictures #11 and 12.

The brick façade will need to be carefully evaluated and repaired as one could see some signs of cracks, spalling, deep repointing, etc. See pictures #13A through 16A.

There are some badly rusted details on the sign and on the roof which need to be removed or repaired as soon as possible, as pieces could fall and this represents a liability.

We proceeded again to the portion to the left side of Eliot Street, which is the area we observed the exterior first. This appears to be a two-story building with a partial basement. The second floor structure appears to be built of wood joists supported on steel beams.

We proceeded to the right side of the building, but toward the left in a few areas which were exposed, we noticed some bad mold (see pictures #17A and 18A) and rot damage on the structure above as one could see on the pictures.

As we proceeded to the portion of the building over the parking lot starting from the extreme right of the floor which corresponds to the floor above the garage and on the side of Central Square, we noticed a large space, which would be a cathedral ceiling built of steel columns, steel beams, and steel decks.

The steel portion of the building appears to be in relatively good condition, but rust has started to damage the bolts, and the beams will need to be wire brushed to

white steel and repainted. Rusted bolts will need to be replaced. See pictures #22A through 24A.

The portion of the building built of steel framing appears to be in good condition. One could see some cross bridging designed for wind bracing or seismic. This is an indication that this building was designed professionally.

As we proceeded slightly from the right to the left, we noticed the next section where the roof was much lower. There again, across the drop ceiling one could see some rust and steel decks. At this time we can see that some of it is badly to slightly rusted. See pictures #25A through 29A of the rusted deck. The deck will have to be verified after wire brushing and drilling through the areas which are rusted the worst where they have lost too much thickness. Some of the sections will need to be replaced.

We then started to look at the area where the wood structure starts on the floor above. There one could see that the situation has triggered some collapses and most of the wood structure would have to be completely removed. See pictures #19A through 21A.

Whatever wood structure remains, it would have to be properly shored during that time unless one elects to remove the entire wood structure.

The building starts to have a second floor toward the end of the parking lot going on the left side of Eliot Street. See picture #30A.

As we looked at the back of the building facing the train tracks, we noticed some important windows which were partially in filled toward the exterior. Unfortunately, upon doing this, the existing lintels were improperly supported. Some structure will be necessary to either reinforce a pier to the original capacity or to reinforce the infill to make it work as a bearing wall. See pictures #31A through 35A.

The improper piers are only the piers between columns.

In other conditions there are columns supporting the lintels which are proper which are not damaged except that they are slightly rusted.

As we proceeded toward the very back wall of the building, we noticed that the steel in the wall was in bad condition having a substantial amount of rust which needs to be properly assessed. The wood above needs to be removed. See pictures #36A through 39A.

We started our next visit in the basement at the extreme left of the building walking toward Central Street and noticed that the structure has a slab on grade which appeared to be in relatively good condition.

There are some steel columns which have some rust and need to be assessed to determine the degree of damage.

There are concrete beams above and they also appear to be in generally good condition. There are rusted columns and rusted beams. All rust will have to be removed to properly assess the structural components. See the picture of the main steel column, all on the left of the building. See pictures #1B through 3B.

There is much obstruction in the basement which should be removed; at that time the structure could be better assessed. Nevertheless, it is our opinion that most of the structure in the basement which would include the support, the beam, and the slab on grade are in generally good condition or conditions which could be properly repaired.

As we walked through the basement, at one point we started to see some wood structure indicating a temporary support which had been there for a long time. See picture #4B.

This wood structure will be substantially damaged. At this time it is not properly exposed, but one could see that it was still wet in several areas and there was much rot into the structure. As mentioned above, it is our opinion that most if not all of the wood structure would have to be removed. See pictures #5B and 6B.

The lower basement has approximately one foot of water. See picture #8B.

We then proceeded to look at the structure above the garage and noticed some small portions of the slab which have been damaged by rust of the reinforcement. See pictures #9B through 12B. The structure above the garage is in very good condition. This took us to the end of the lower level which is partly a basement and partly parking on the extreme right of the building.

In the stairs adjacent to the garage there is a crack which appears to be old and will need to be addressed. See picture #13B. Note that most of the masonry is in very good condition.

After the garage, we proceeded to the second level through the stairs where we mentioned the crack before. Here we noticed a partial collapse which is depicted on pictures #14B through 16B. This would be approximately in the middle of the building not far from the garage area. Particular care must be given on removing this area without damaging the rest of the existing structure.

Some of the stairs are in bad condition and will need to be protected during the work. See picture #17B.

Toward the left, we crossed a large area built of steel beams, steel columns, and concrete which is in relatively good to very good condition. Some of the bolts are rusted and will need to be replaced.

From time to time a few cracks could be seen in the masonry which will need to be addressed. See picture #18B.

As we reached the west left end on Eliot Street in the back there is a very large room built of steel. The steel members appear to be in good condition. The steel joists will need to be properly assessed at close range, but the deck is in bad shape and will need to be replaced.

Some of the deck has failed and will need to be removed and properly replaced after the joists are assessed and addressed accordingly. See pictures #19B through 21B.

II. RECOMMENDATIONS

It is our professional opinion that this building can be rehabilitated. Among the structural components of the building, we noticed that the concrete was in relatively good to very good condition with a few necessary repairs by exposing the steel, wire brushing and treating it with Armatek 100, and protecting the steel.

The masonry will need some work.

There is some repointing, crack repairs, and slight masonry rebuilding which will be necessary.

The steel will need to be wire brushed or sandblasted and reassessed. It is our professional opinion that most of the steel that we saw was in good to very good condition, and some of the rusted bolts will need to be replaced or tack welded.

The wood is in generally bad to very bad condition and will need to be removed. We recommend that this be done with great care as some of the wood is bracing the steel and exterior wall for the lateral load; therefore, upon removing and replacing the structure, we recommend that this be done in sections wide enough to leave enough structural restraint to the exterior wall when the work takes place.

New structural wood floors could be connected to steel angles, glue bolted to the masonry wall and to a wood nailer bolted to the steel beams.

Note that most of the observations we made could not be completely assessed because of the obstruction. The damage described above is the result of our walk-through and our general opinion of the building, although we walked through most of the areas, a few more damages would surface after properly exposing the structures.

It is important that all those working on the building be properly insured and should bear full and sole responsibility for themselves and their crew.

It is also important that any loose objects on the project be removed not to be blown by wind into the surrounding areas.

We recommend, as required by the Massachusetts State Building Code, that structural plans be drawn indicating the structures as they existed at the time of the investigation including all new reinforcements necessary to bring the structures up to Code. Such plans would be useful in that:

- They would allow necessary permits to be obtained for the repair work.
- They would provide a good way to estimate the work to be executed.
- They would document the executed work for future reference, such as an event of later alterations to the building.

It is also important that the structural engineer visit the site during construction to verify its compliance with the plans and structural recommendations.

Please let us know if you would like a proposal for our services.

This report addresses only those structural problems observed during the walk-through and documented above. Since few structures were exposed during the visit, other structural problems may be concealed behind finishes, plaster ceilings, and walls. We did not implement computations or verify compliance with earthquake code regulations, and do not claim that all the observed structural members are of the proper size and properly transmit the load from floor to floor.

The structural engineer is not responsible for determining the existence of insect infestation, environmental hazards, and waterproofing.

This report and analysis is based upon observations of the visible and apparent condition of the building and its major components on the date of this inspection. Although care was taken to perform a proper and thorough inspection, we make no representation regarding the existence of latent or concealed defects. No warranty or guarantee is expressed or implied with any structure. We do not take responsibility for the capacity of stairs, banisters, and handrails. This report is made only in the best exercise of our ability and judgment.

Conclusions in this report are based on the normal working life of various structural items. Predictions of life expectancy and the balance of useful life are not necessarily based on industry and/or statistical comparisons. It is essential to understand that actual working conditions can alter the useful life of any item. Previous use or misuse, irregular maintenance, faulty manufacture, unfavorable conditions, unforeseen circumstances and acts of God can make it impossible to state precisely when a specific item would require replacement. The client should be aware that certain components at the referenced property may have functioned

normally at the time of the inspection, but due to their nature may have deteriorated rapidly without notice.

Time spent in legal or insurance related items or subpoenas for fact-findings sent by the other party (parties), if needed, will be billed on an hourly basis and charged to you.

All repairs recommended herein require design and supervision from a structural engineer. Our office specializes in structural construction and can be contracted for further investigations and the preparation of structural plans referred to above.

If you disagree with any issues pertaining to this report, please contact our office and send us a marked-up copy with your comments.

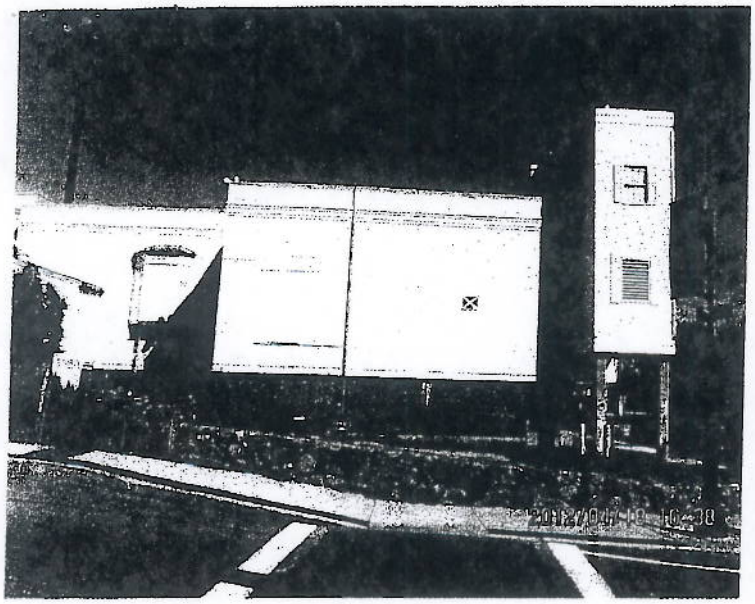
Should you have any questions, please feel free to contact me.

Please contact me by phone, fax, or letter. If you would like to send an email, please contact our administrative assistant.

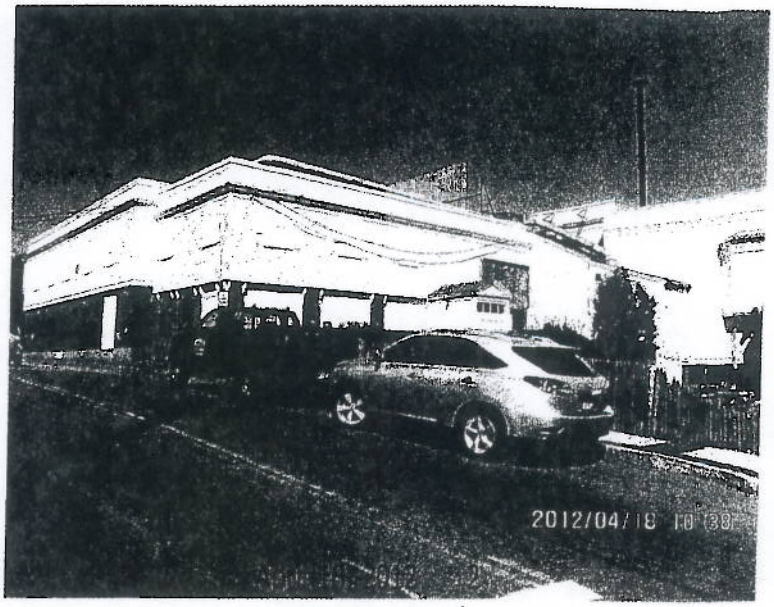
Very truly yours,

Rene Mugnier P.E., Principal
RENE MUGNIER ASSOCIATES, INC.

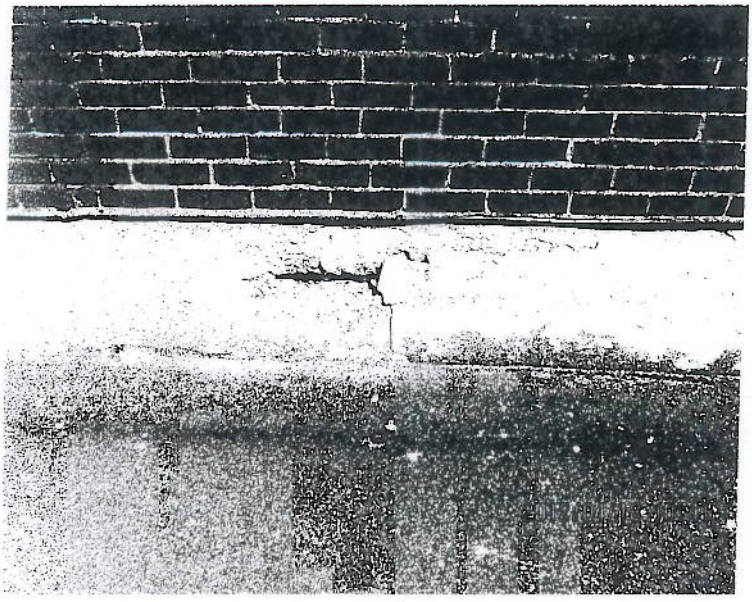
RM/jp



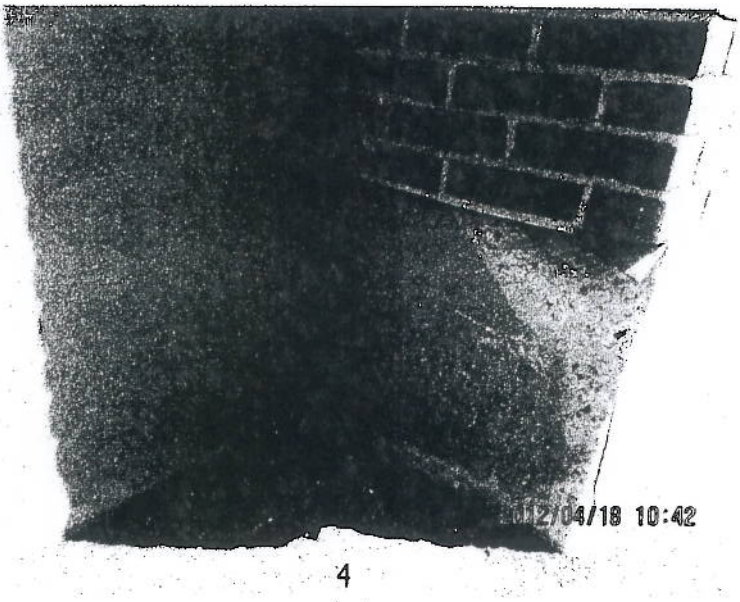
1A



2A

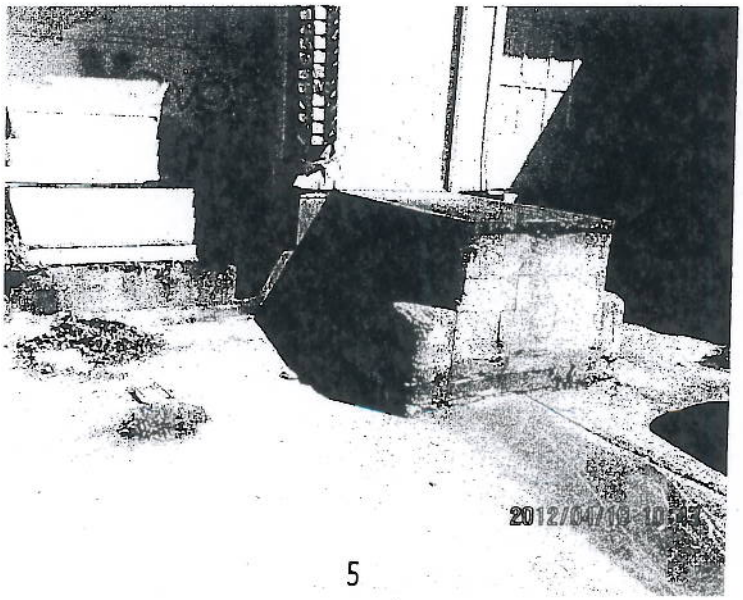


3A

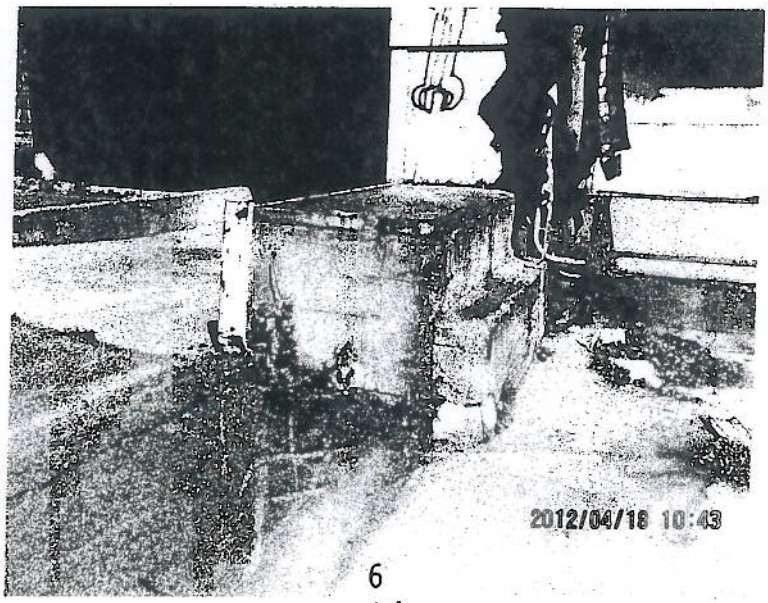


4

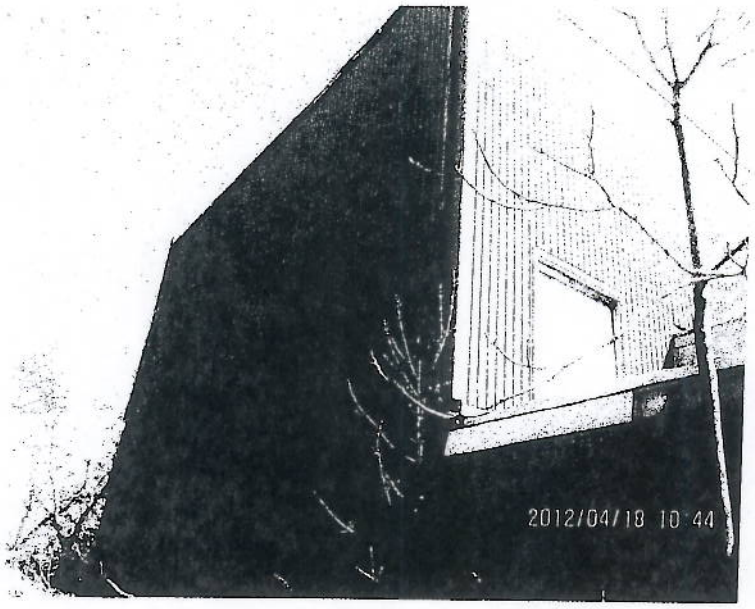
4A



5

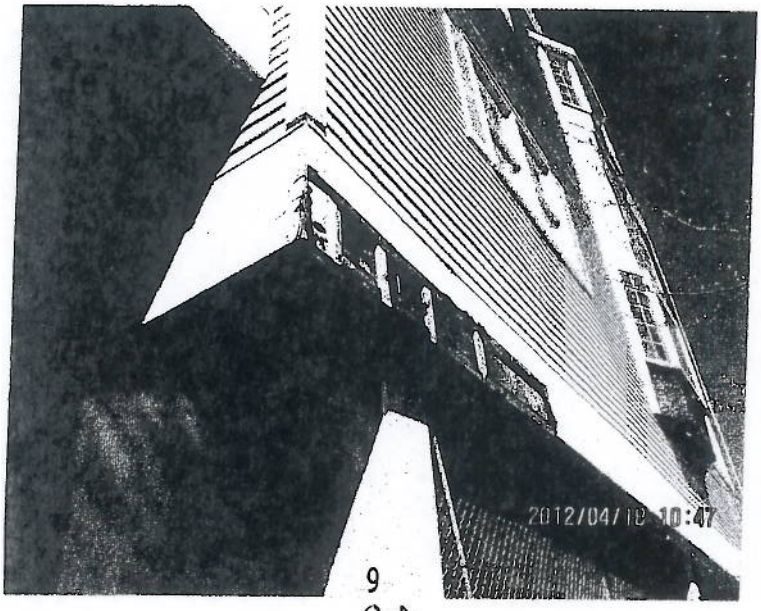


6



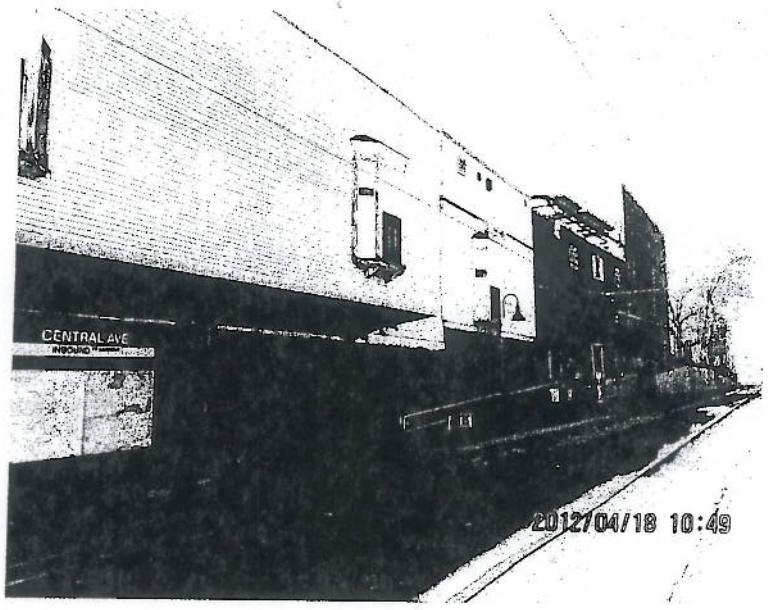
7A

8A



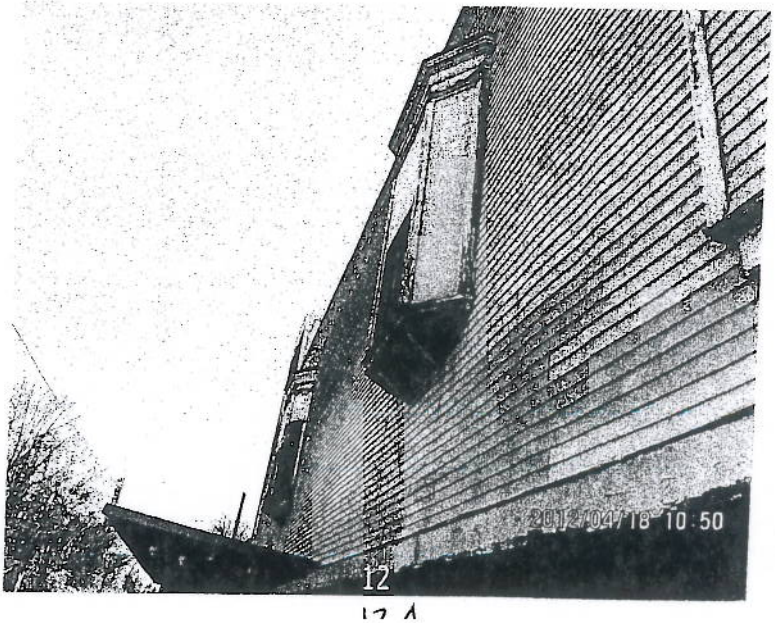
9

9A



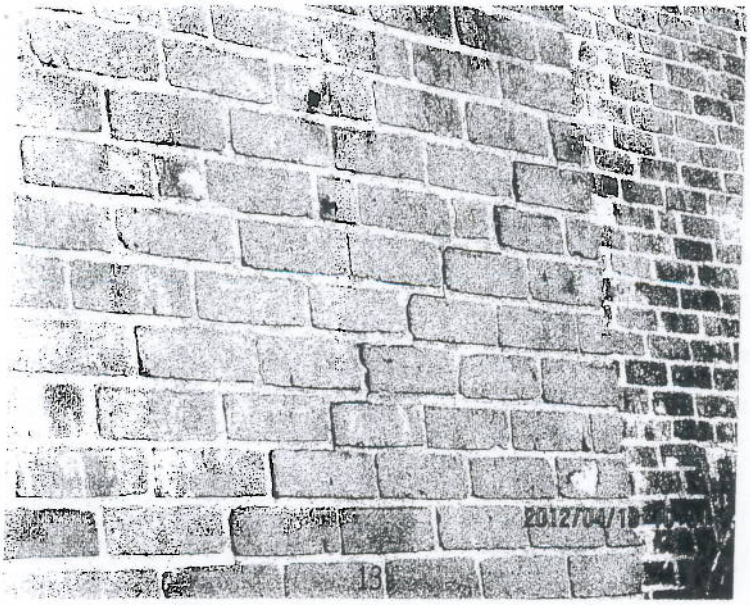
10A

11A

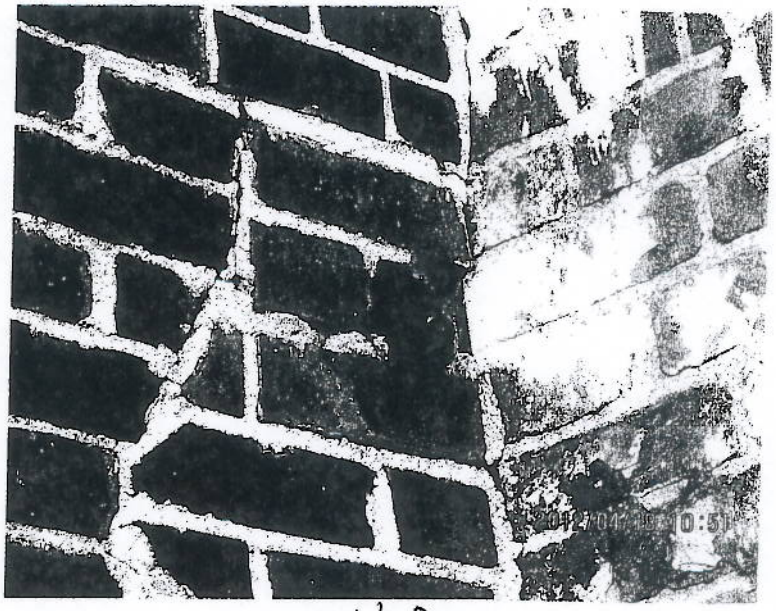


12

12A

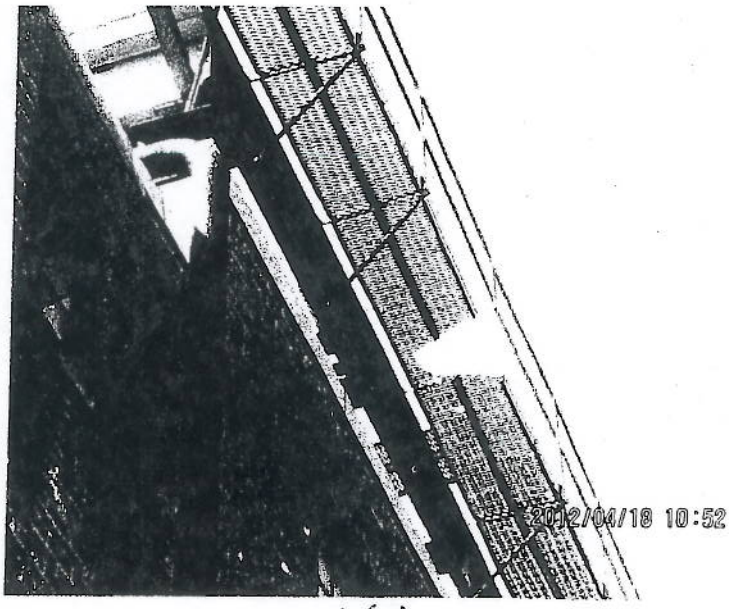


13A

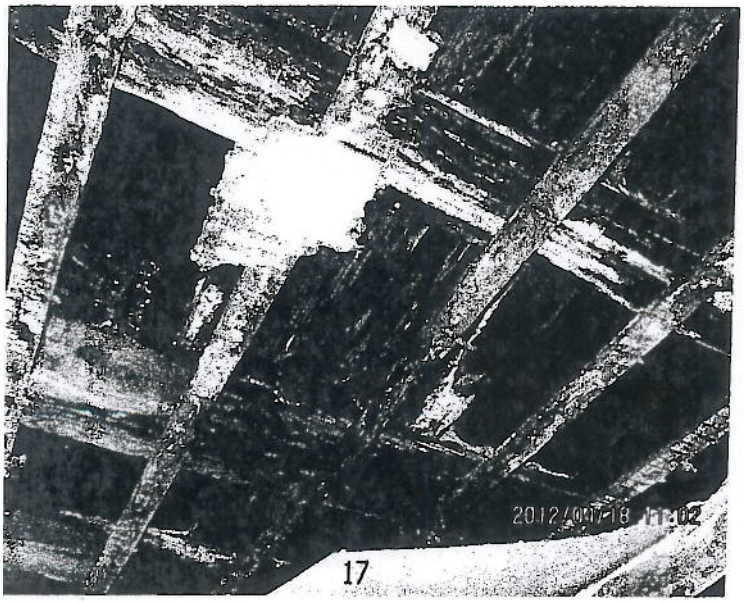


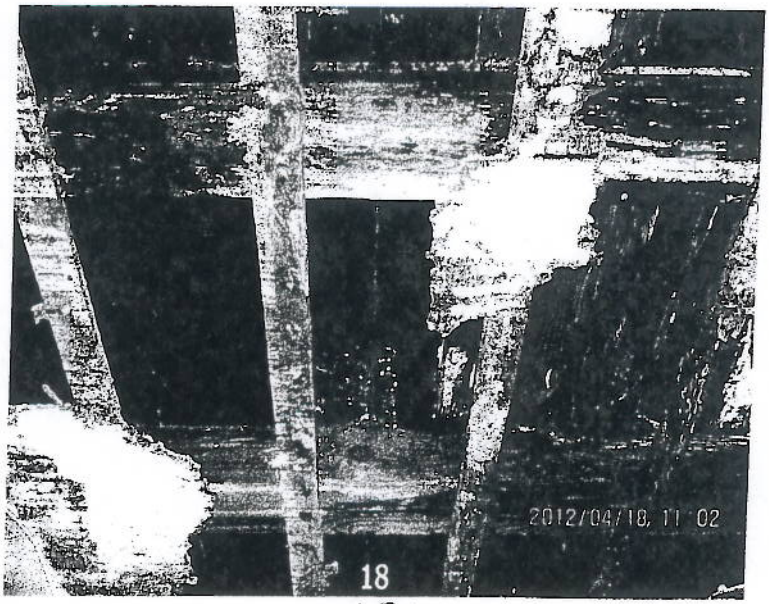
14A

15A

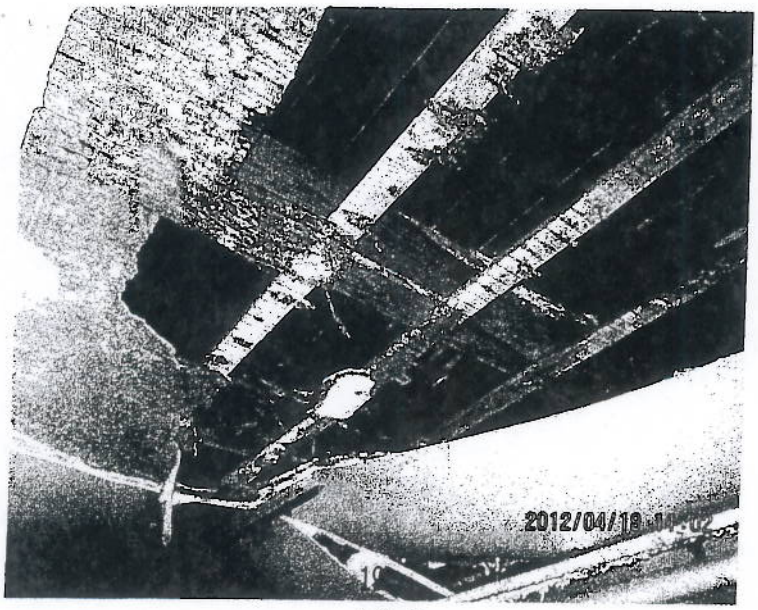


16A

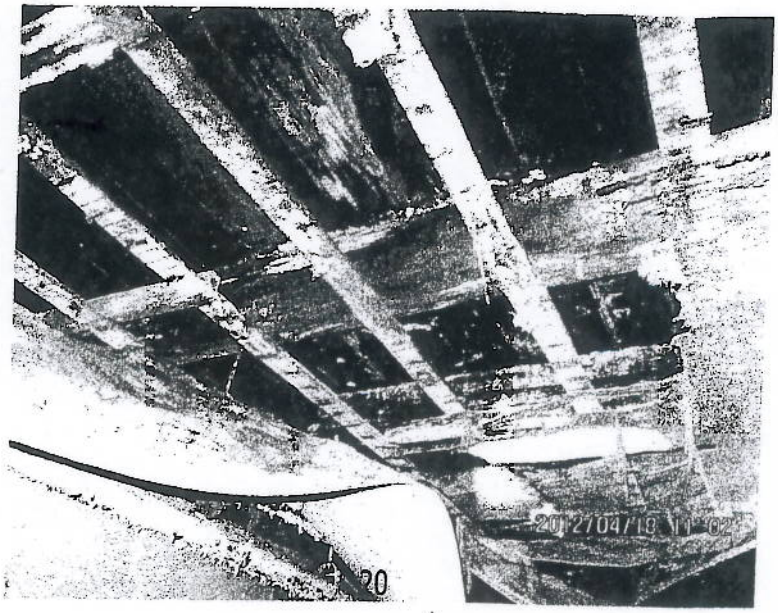




18A

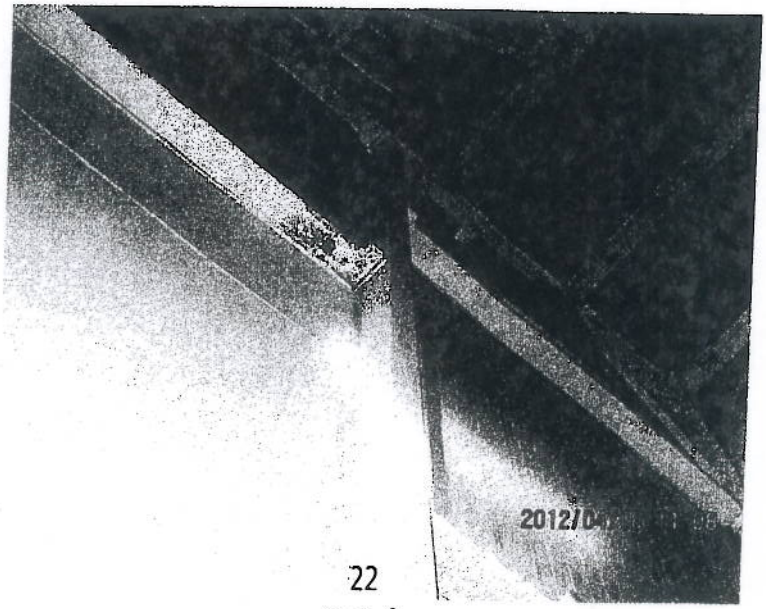


19A



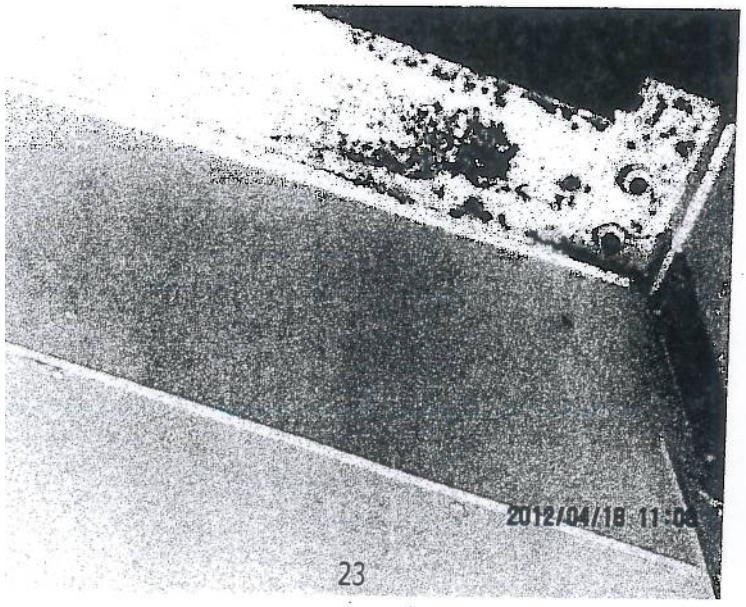
20 A

21 A

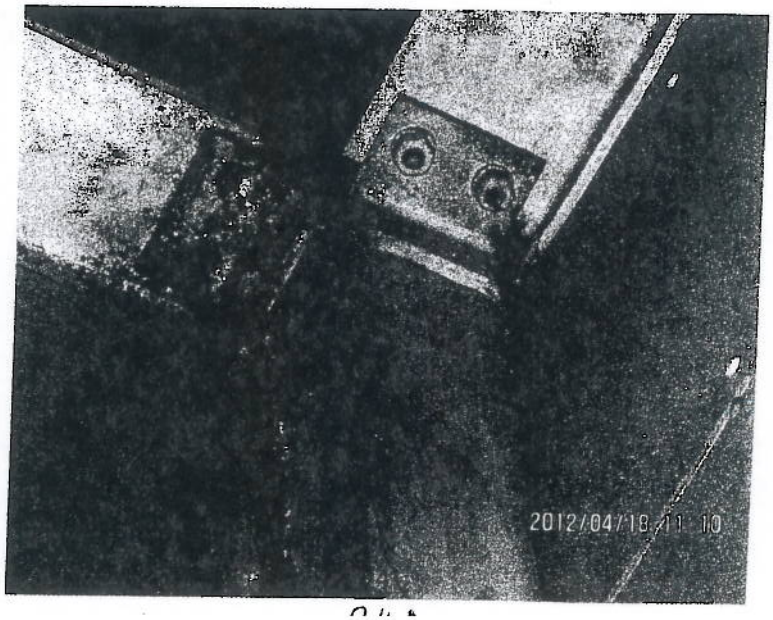


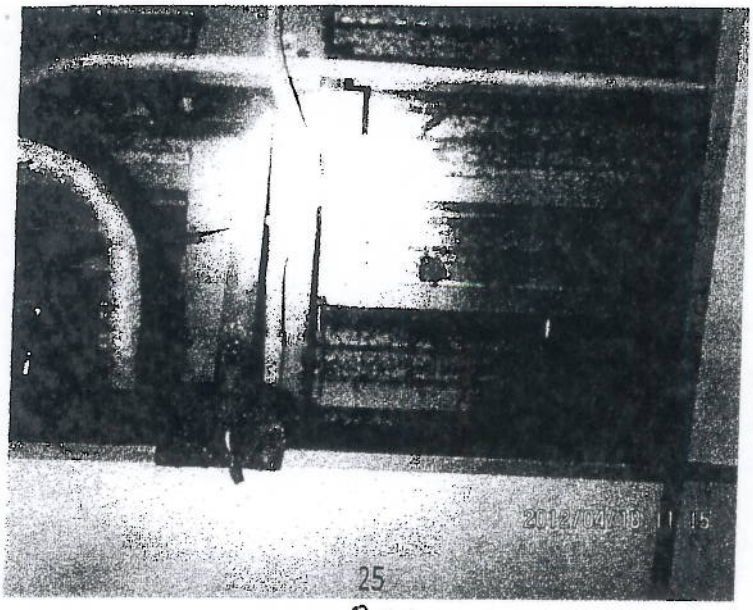
22

22A

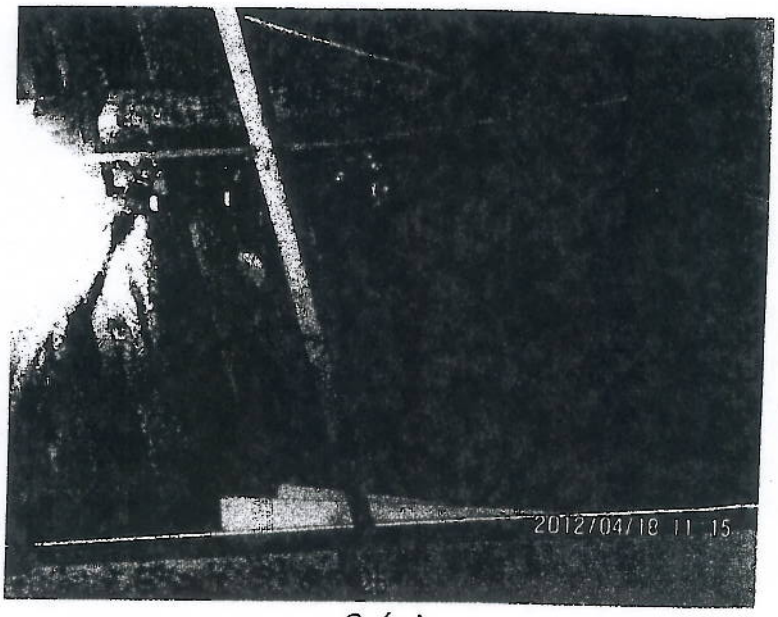


23

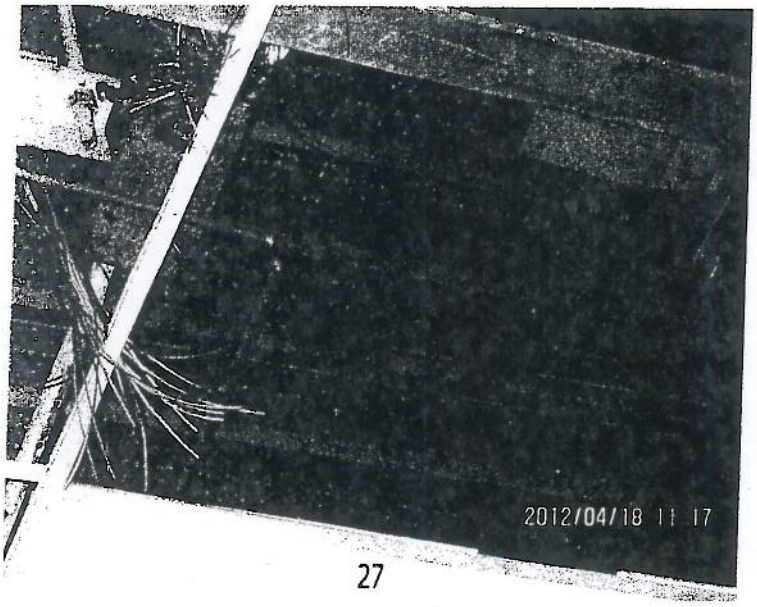




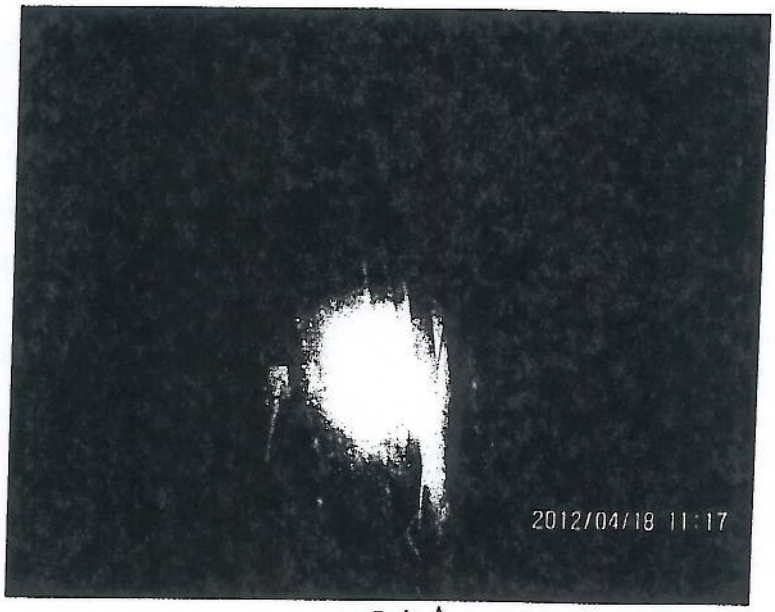
25A



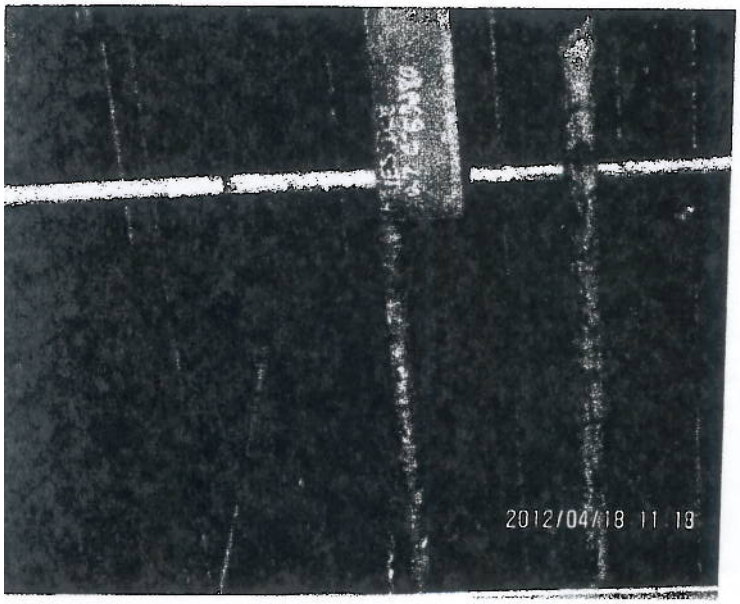
26A

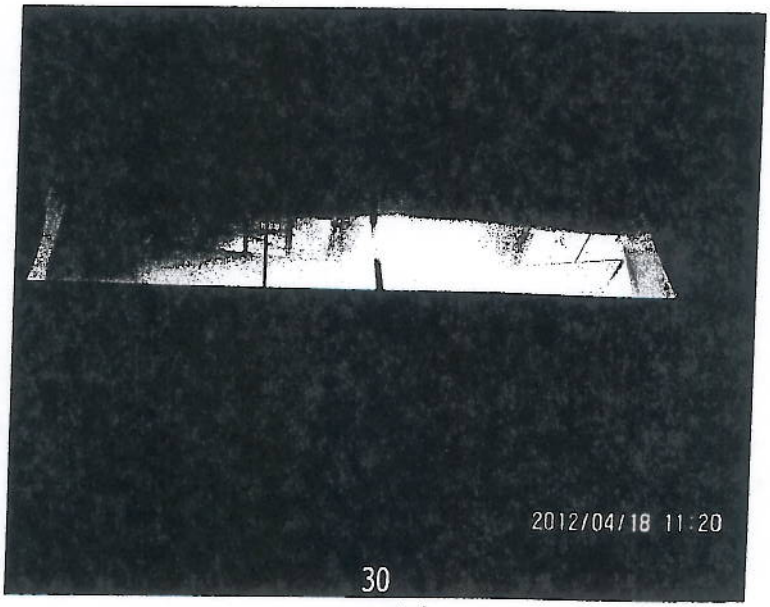


27A

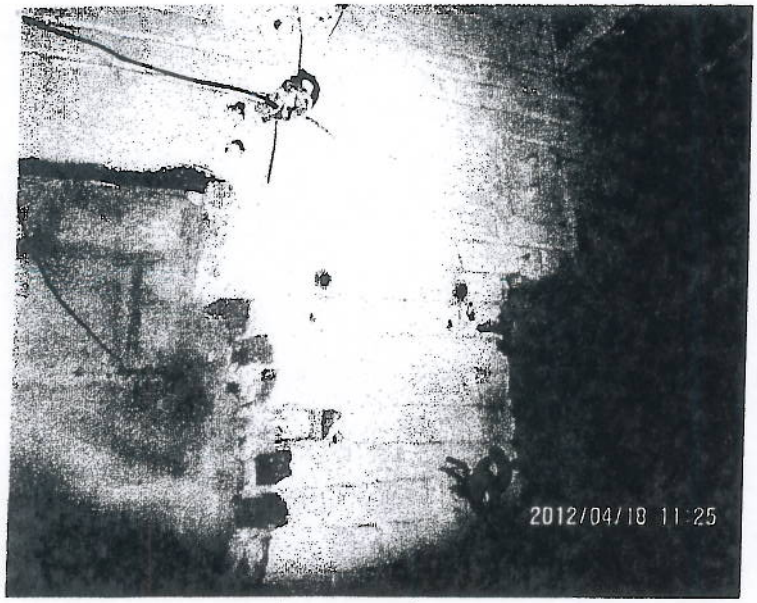


28A

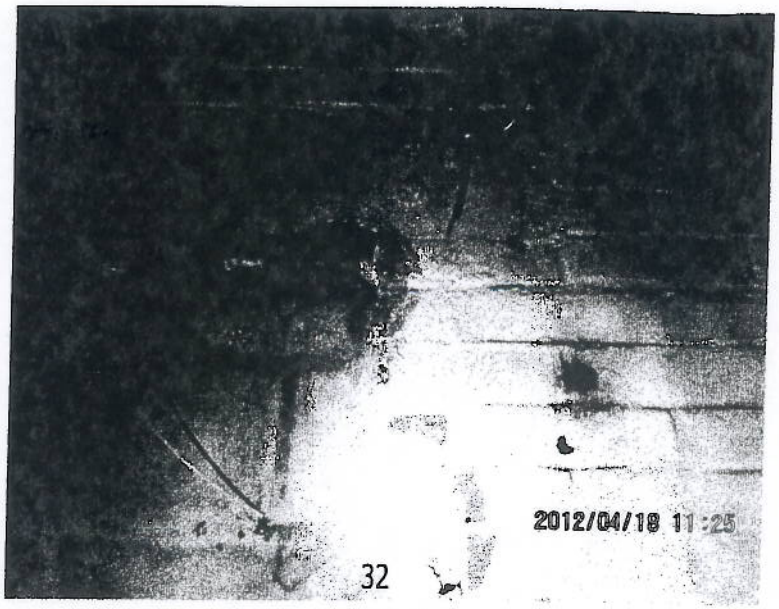




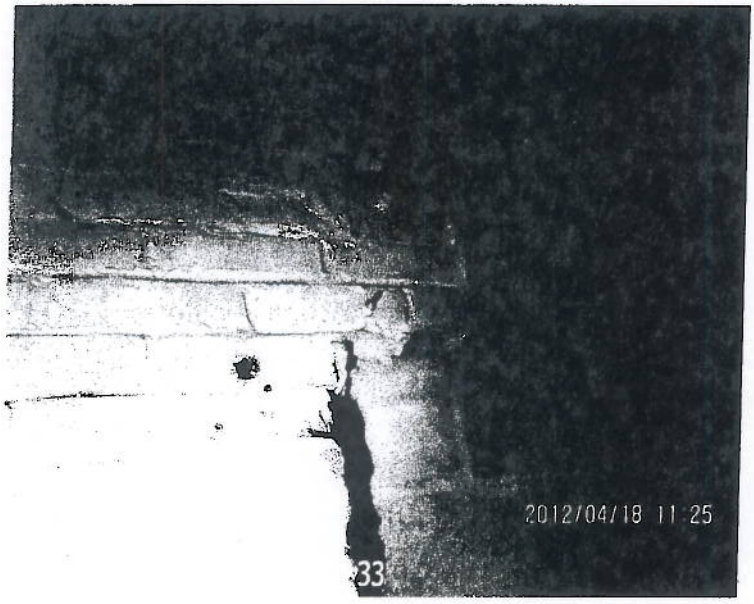
30A



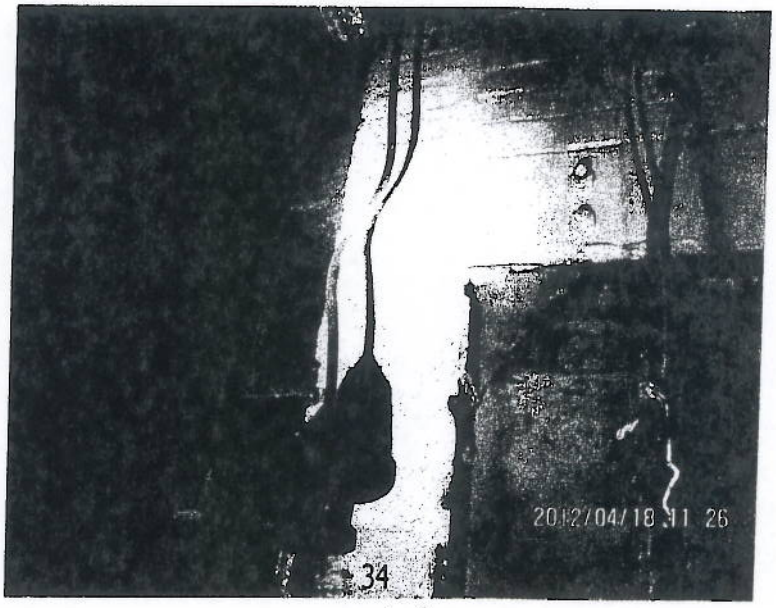
31A



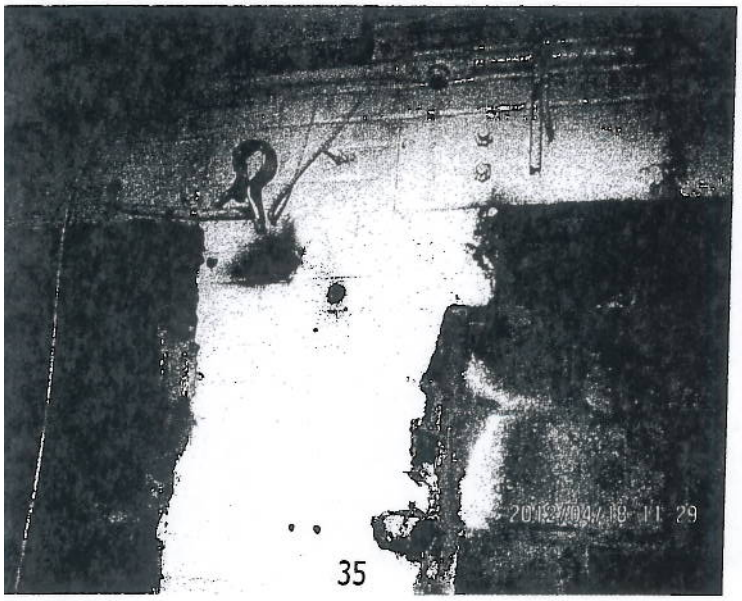
32 A

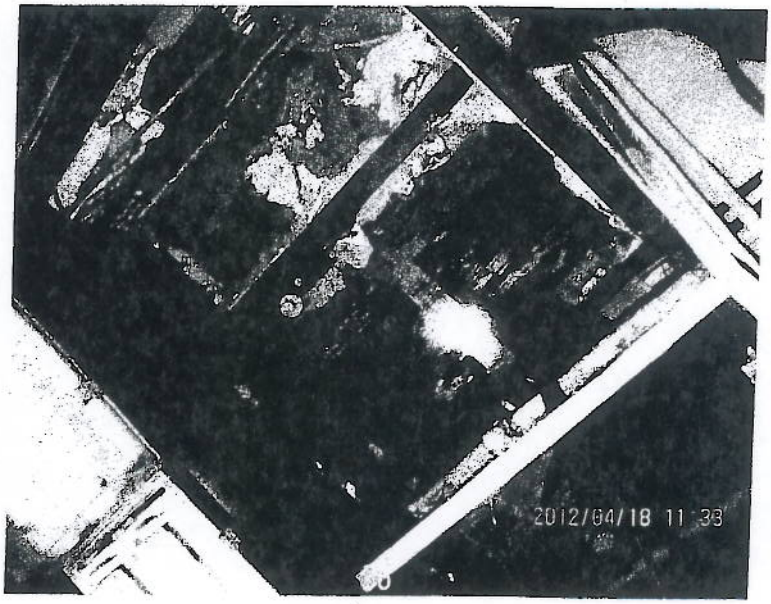


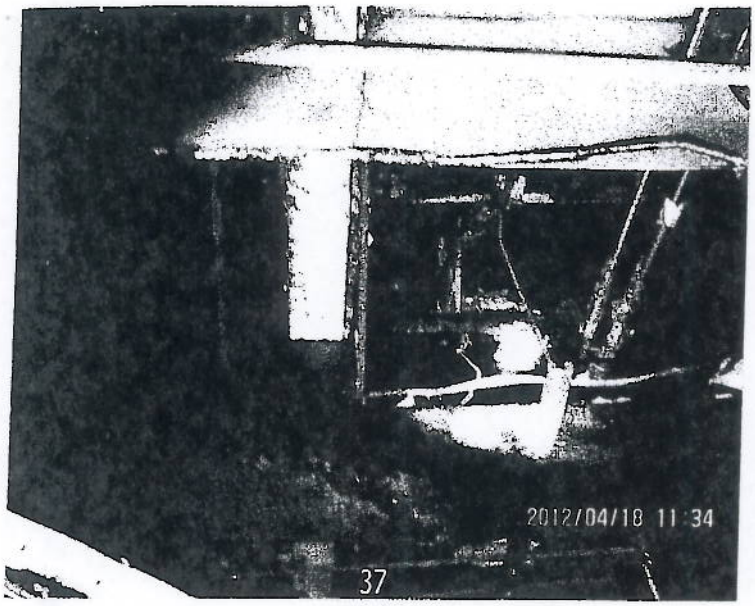
33A



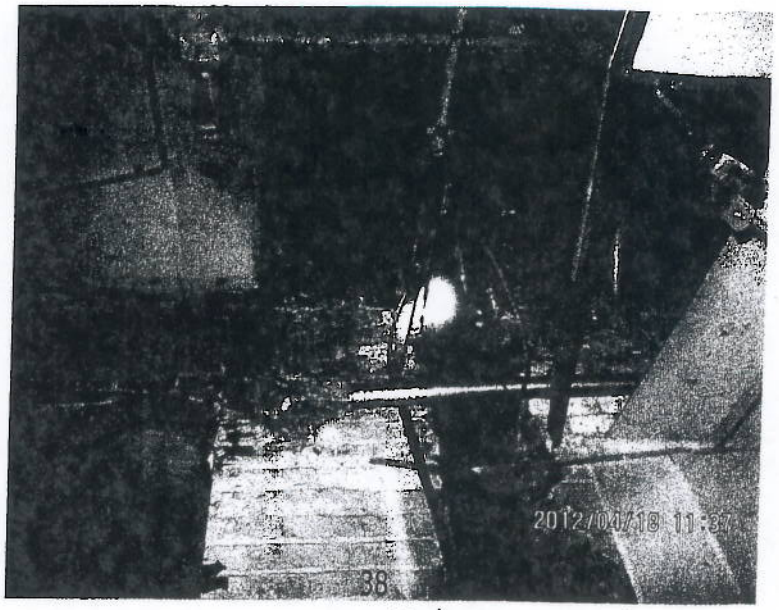
34A



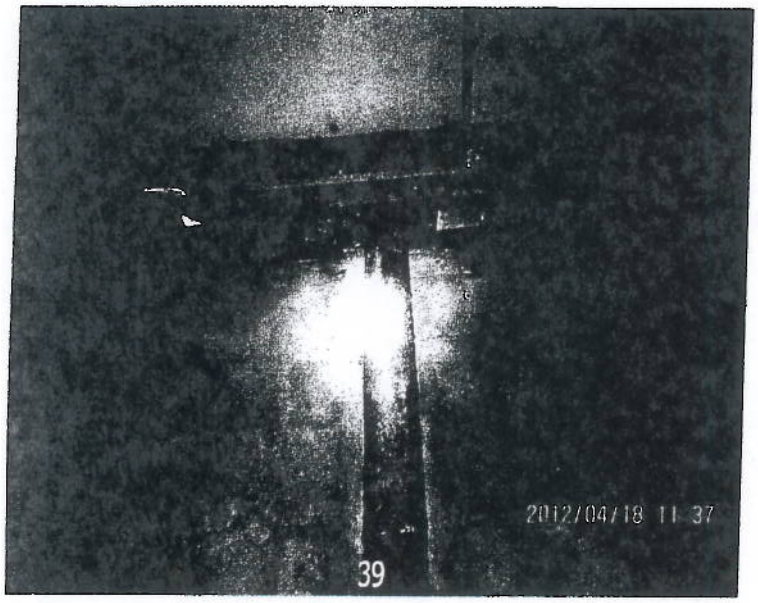




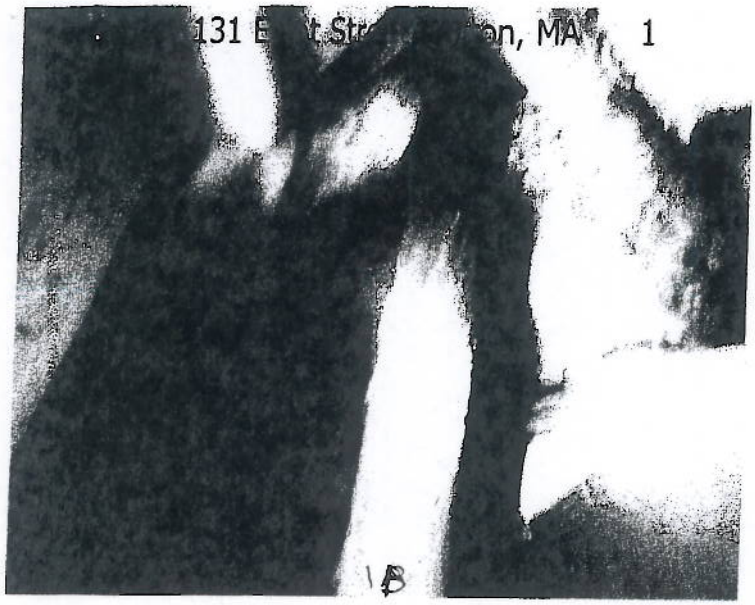
37A

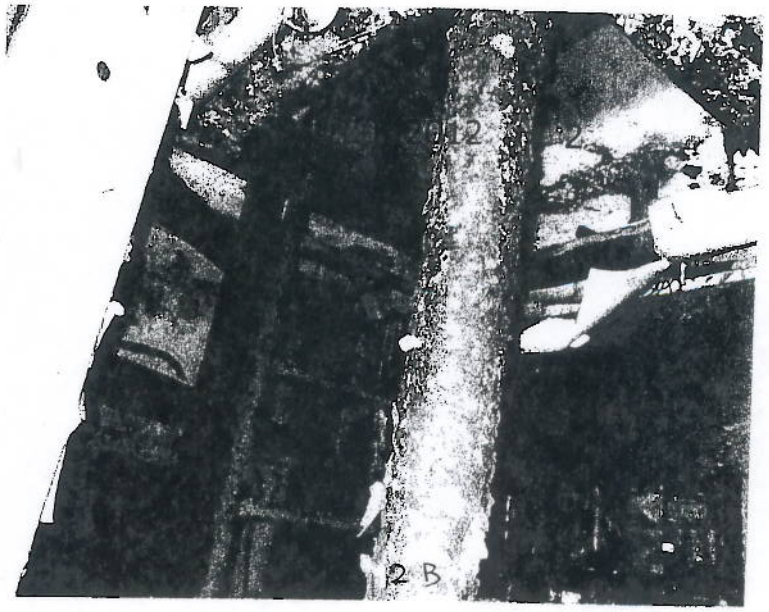


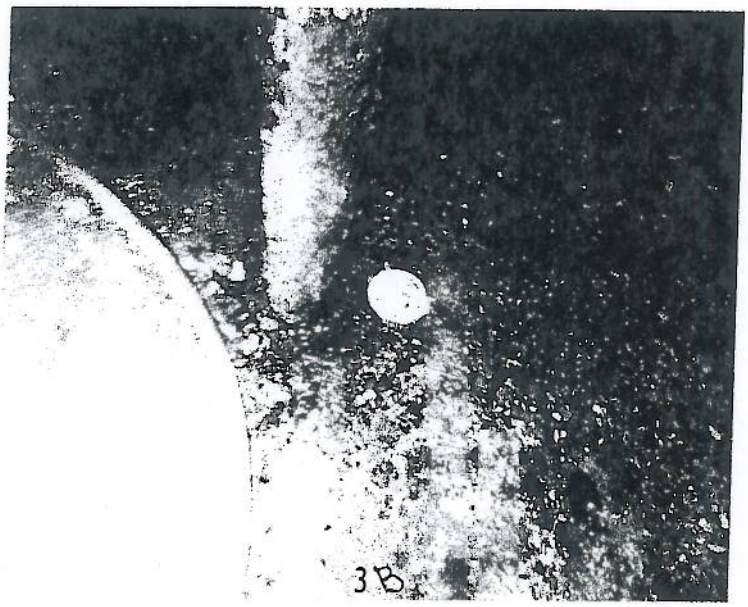
38A



39A

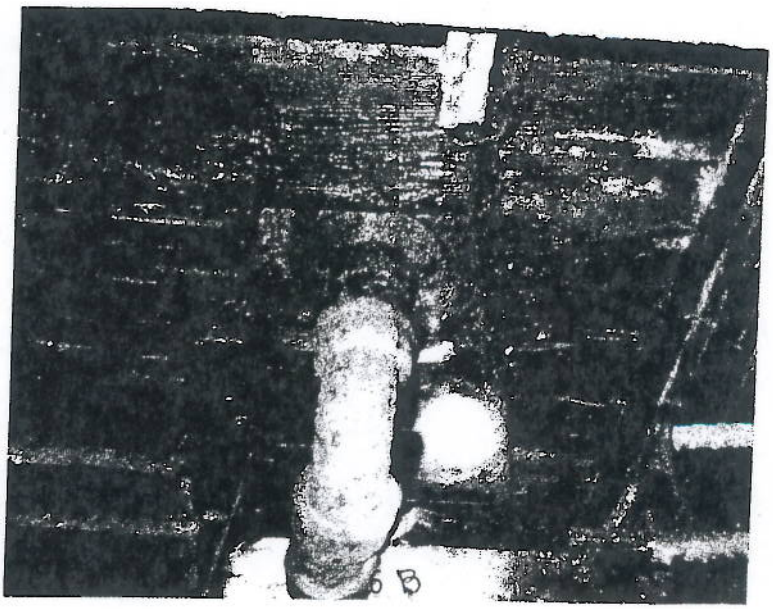

131 E t Str n, MA 1
1B

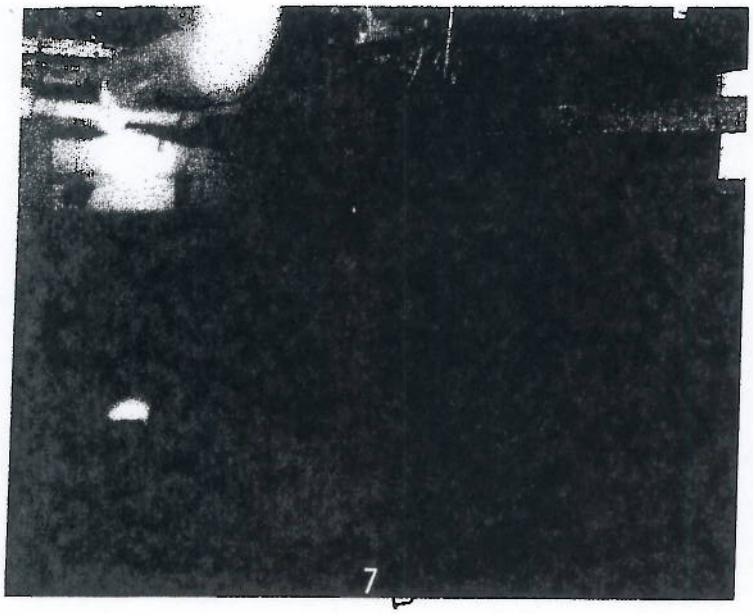

2B

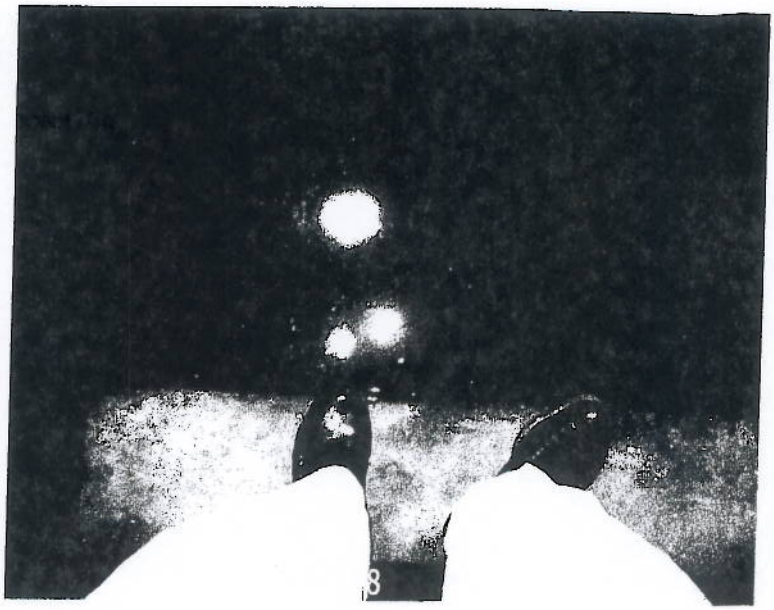

3B

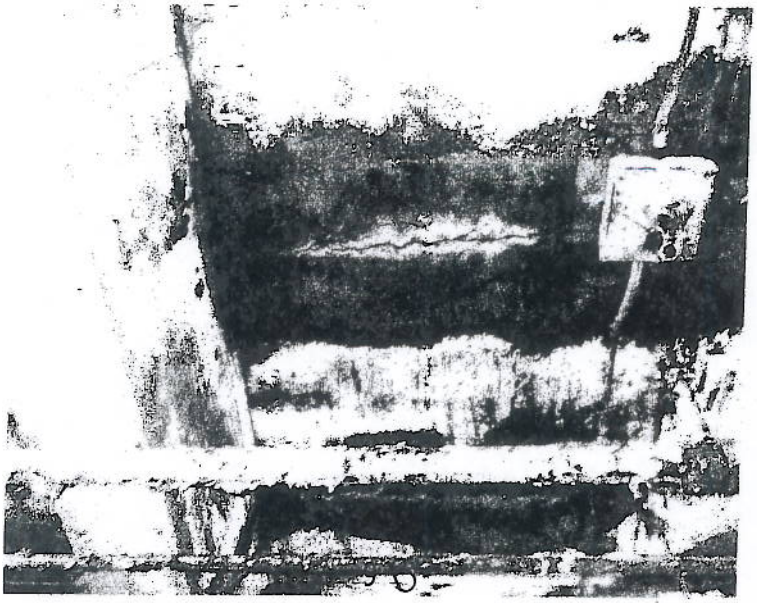

4B

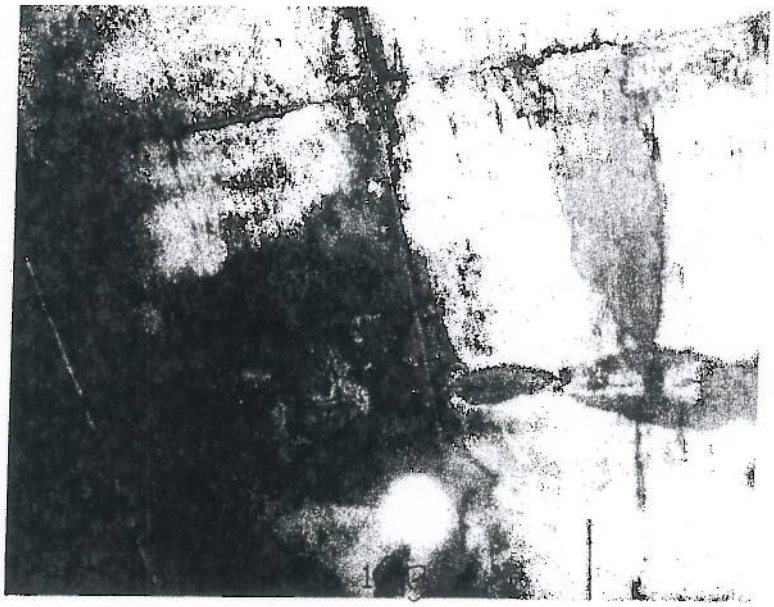

5B


6B


7

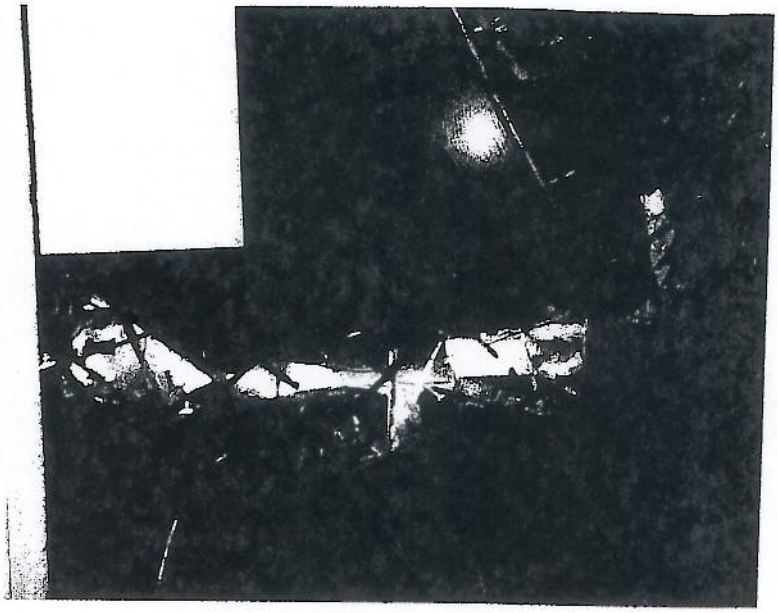

8

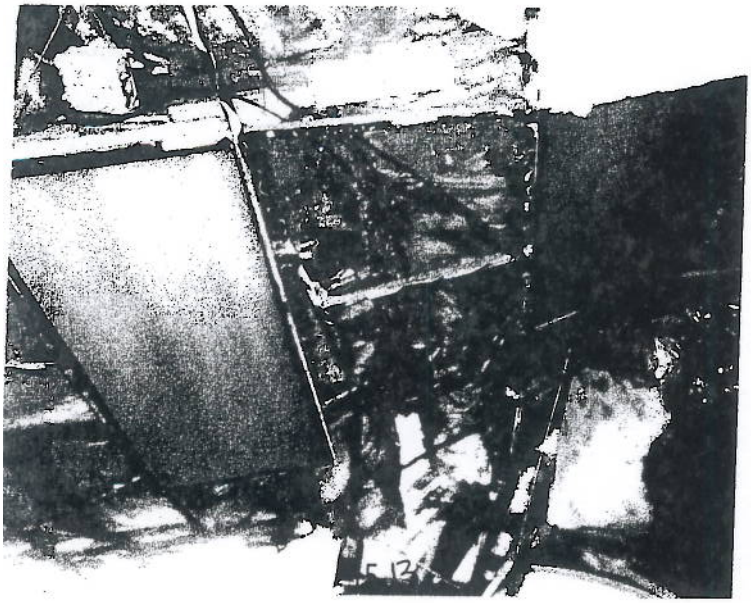


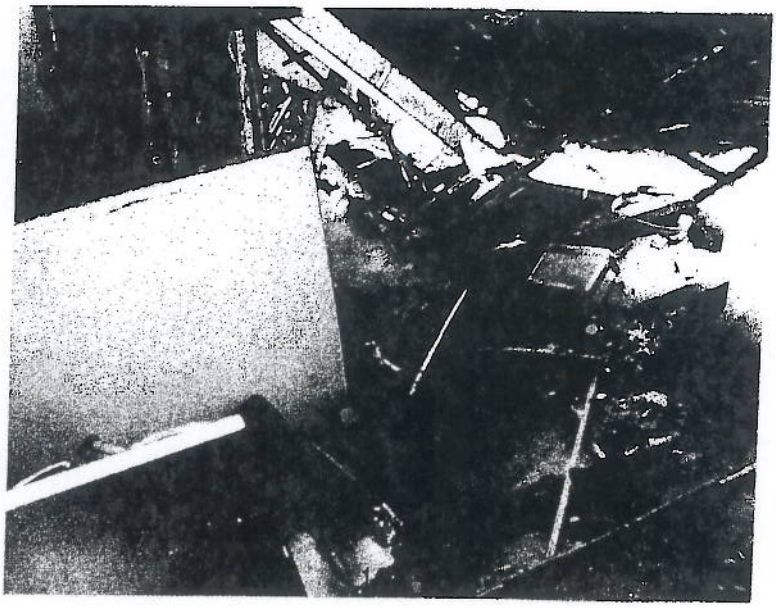


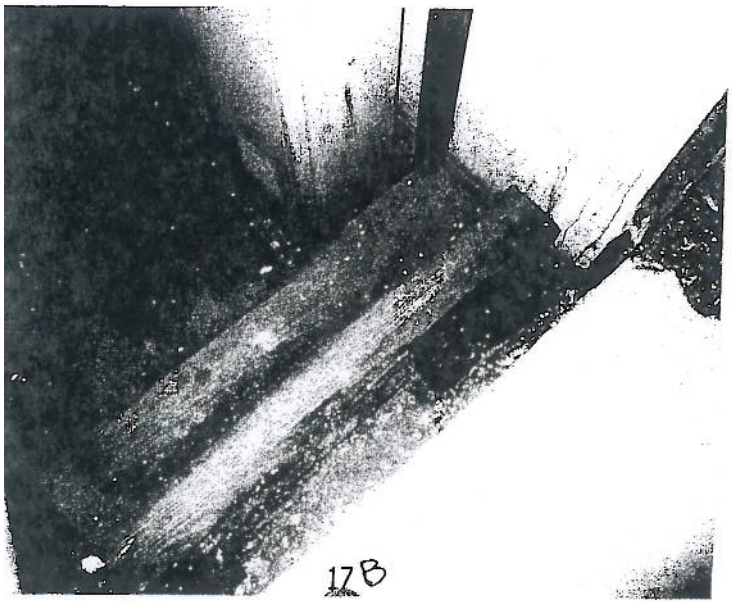

11


12

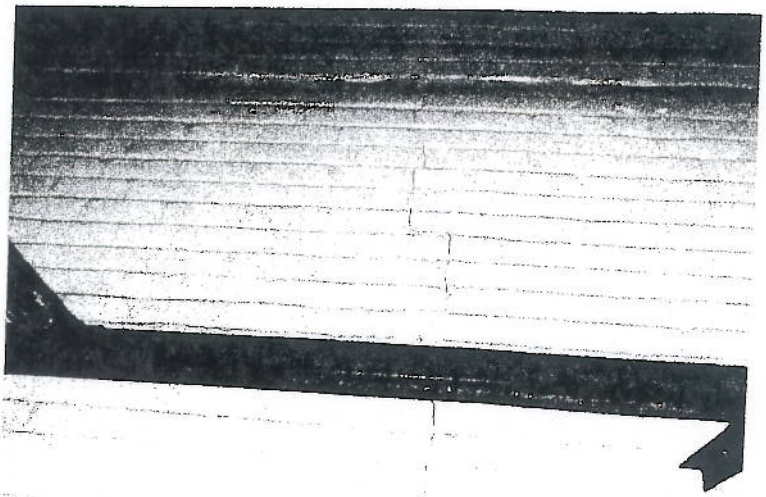




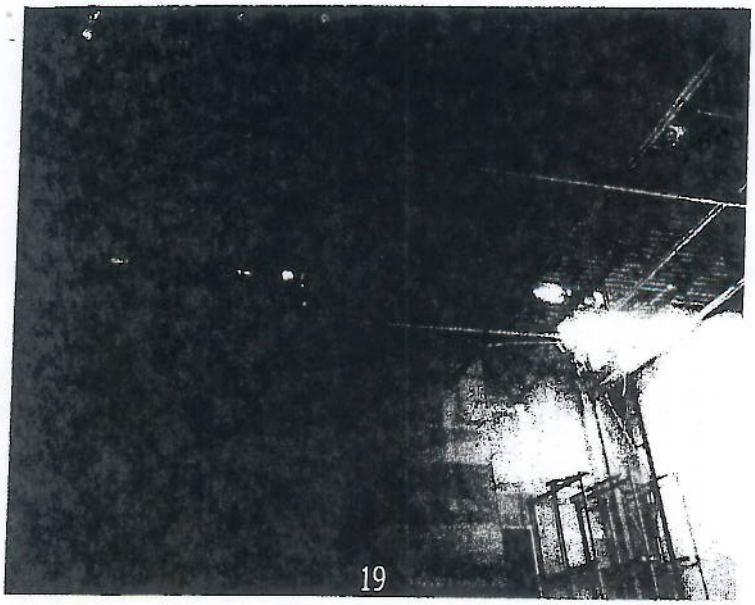




17B



18 B


19