

ANALYSIS —
ACCOUNTS PAYABLE FUNCTION

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INTRODUCTION AND PROJECT OBJECTIVE

This report analyzes the unnecessarily long time lags between receipt of invoices from vendors and the preparation of checks leading to the lowering of the hospital's liabilities. Involved is the establishment of procedures to be adhered to in the accounts payable function. A "total picture" concept was considered with respect to the hospital and its suppliers. The effects or impact of the City of Highland Park was also delved into. Recommendations were made accordingly with respect to this overall accounts payable function.

PRESENT SYSTEM

Currently, within the Accounting Office there are three people; the hospital accountant and two clerks.

The Accounts Payable clerk spends all of her time (40 hours/wk.) working with accounts payable data. In this capacity she is to perform two functions: 1) post entries in the purchase journal to record the hospital's current liabilities; and 2) prepare information (such as computing discounts, checking prices, maintaining files for invoices, purchase orders, packing slips, etc.) so that when invoices fall due, they may be paid. In this respect, the accounts payable clerk assists in the lowering of the hospital's liabilities to its suppliers.

The second clerk currently types up the vouchers so that they may be submitted to the City Controller for payment. She spends approximately 7 hours per week typing vouchers, or 17.5% of her time is devoted to this function.

Current Payment Procedure

An analysis of the paperflow relating to the accounts payable function will explain the accounts payable clerk's job in detail.

The Incoming paperwork is:

1. Copy 7 of the Purchase Order (duplicate of Purchase Order)
2. Copies 8, 9, and 10 of the Purchase Order (a snap-out set attached to purchase order - the hospital voucher).
3. Invoices from vendors
4. Copy 2 of the purchase order (this is the invoice-voucher which must be completed by the vendor, signed, and notarized - a requirement of the City of Highland Park)
5. Packing slips (sent to accounts payable through Purchasing, Pharmacy, or the Lab.)

6. Invoice-vouchers from the Business Office, Medical Education and other direct charge departments (prepared in these departments and sent to the accounting department - usually in payment for direct charge services, such as for the interpretation of EKG's)

Purchasing sends copies 7, 8, 9 and 10 to the accounts payable clerk after they have prepared and issued a purchase order. She files these (paperclips them together) in file cabinet "A" as shown on the present layout of the Accounting Department (Appendix A, page 32). They are filed in alphabetical order by vendor, and since only 27 letter guides are used, no real attempt is made to keep them in perfect alphabetical order, for example, by filing upon second letter, etc.

Invoices, invoice-vouchers, and packing slips are filed in like manner, however, they are filed in a small desk file which she keeps in her desk drawer. Before she files these items, they are stamped with the date received.

The above paragraphs define the filing system up to the point of the start of the actual payment procedure. At this point, an explanation is in order for the first function of the accounts payable clerk - posting entries to the purchase journal. The policy currently adhered to is not to make any entries in the purchase journal until the goods have arrived or services have been performed, and not until the clerk has received an invoice and invoice-voucher. This means that she will keep all packing slips, etc. in her desk file until the invoice and invoice-voucher arrive. This is her cue to post entry to the purchase journal. Essentially, this means that she does not record any liabilities until she has all of the requisites for payment - the packing slip, the invoice, and the invoice-voucher. No payment can be made unless at least the invoice-voucher and either packing slip (in case of goods) or invoice (in case of goods or services) are present.

Another factor which affects the payment procedure is the closing-out of the purchase journal each month so that the monthly financial statement may be prepared. This fact, coupled with the policy of not posting entries to the purchase journal until all items required have already arrived, possesses overtones which affect payments to vendors. This point will be elaborated upon further in the evaluation of the present system following.

At the start of the month, the accounts payable clerk will follow the steps below:

1. She first attempts to match-up and process all data relating to vendors offering discounts.
2. When time is available, she processes those vendors' invoices, etc. who do not offer discounts. This she accomplishes by starting with the letter "A" (in her desk file), and if she has enough information for payment, she will post the entry to the purchase journal and compute the extensions etc. and give the data to the other clerk who will type up the vouchers.
3. When the end of the month nears, she rushes to clear out her desk file so that at the beginning of next month she can start without any left-over packing slips, etc. received during the prior month still in her desk file.

The disposition of the paperwork after the desk file has been cleared out is as follows:

1. For all purchase orders which are ready for full or partial payment.
 - A. A voucher number (sequential) is assigned to copies 8, 9, and 10 of the purchase order (the snap-set hospital voucher).

- B. The vouchers are typed listing the serial numbers, vendors' data and invoice number, purchase order number (items purchased on different purchase orders but applying to the same vendor can be paid with one voucher providing the total payment does not exceed \$500) and the amounts.
- C. After typing, the voucher number is recorded in a voucher register along with the vendor's name and the amount of the voucher.
- D. Copy 7 of the purchase order is filed in a closed file numerically by Purchase Order number. (File "D" on present layout)
- E. Copy 9 of the purchase order (copy 2 of the hospital voucher) is filed in a closed alphabetical file (File "C" on present layout).
- F. Copies 8 and 10 of the purchase order (copies 1 and 3 of the hospital voucher), the invoice-vouchers covering the amount of the voucher, and all packing slips and vendor's invoices are sent to the hospital Director for approval.
- G. After being signed, they are submitted to the City Controller, who prepares a list of claims and accounts for presentation to the City Council for approval. The Council meets every Monday evening to review this list.
- H. Copy 10 of the voucher with all attached packing slips, etc., is returned to the Accounting Department, where they are then filed by Voucher number (file "B" on present layout).

All filing is performed by the accounts payable clerk.

- 2. All items not being paid due to lack of some necessary element, such as the invoice-voucher, are serialized (entered in the purchase journal and filed away in file cabinet "D" on the present layout). Within File "D" she maintains three separate "open" files: One for all purchase orders which she has just serialized and on which payment could not be made; one for the months preceeding the month she has just closed out; and the third file stores those purchase orders for which she has sent purchase expeditors on (pulled from the second file). They are usually sent to those vendors who are dealt with on a volume basis. The main reason for sending the expeditors was the failure of the vendor to return the invoice-

voucher, which is sent along with the purchase order to the vendor.

The means employed to handle invoice-vouchers coming from the Business Office, Medical Education Department, and the other direct charge departments, is to enter them in the purchase journal (serialized) upon receipt, and process them through for payment by preparing a hospital voucher for them.

An analysis of the elapsed time between the typing of vouchers and the preparation of checks (check date) from a sample of two hundred vouchers indicated that nine days was the average time span. A further analysis of one particular supplier of services (see Appendix B, p. 34) demonstrated that an average of thirteen days had elapsed between the typing of the vouchers and the check date. It was determined that an average of seven days elapsed between the check date and receipt of check by the supplier. It should also be pointed out that the least possible number of days between check date and receipt by vendor was five days.

The current policy of recording liabilities when ready to pay vendors instead of when goods arrive at the hospital, leads to a drastically fluctuating workload. This delay in posting of the hospital's liabilities to the books when paying instead of when incurred, creates a false impression for someone examining the purchase journal prior to the very end of month. This situation is bad, for at any point in time, the hospital should know exactly its liabilities to suppliers of goods and services. The present system interferes with the accounts payable clerk's ability to close the purchase journal at the end of the month because her work is not distributed through the course of the period, but rather lumped at the end. This accounts for the broad fluctuation in the number of vouchers prepared per week, as shown in Appendix C, p. 35. From the sample analysis, the preparation of vouchers varied from a low of 38 the week of 4-14-67 to a high of 272 the week of 3-3-67. These variations occur because of the closing-out of the purchase journal and the matching of all packing slips, invoices, and invoice-vouchers with the purchase order at the end of the month. Had they been matched prior to this time, those that were ready for payment could have been processed and cleared out. This would result in a smooth lowering of the hospital liabilities and lead to an increasingly favorable relationship between the hospital and its suppliers of goods and services.

The reason for these occurrences is at least partially justified, however. It is believed that this practice arose because the hospital voucher (copy 8, 9, and 10 of the purchase order) is attached to the purchase order snap-set and on which the name of the vendor is typed through by a clerk in the Purchasing Department. The accounts payable

clerk probably felt that she should not record any of the liabilities of the hospital (in the case of partial shipments on a purchase order) until the entire order was completed, because it meant that she would have to use the voucher to pay the first partial shipment and be left without one to process the succeeding shipments. The policy within which she must work (posting to purchase journal when vouchering or at the end of the month) leads to delays because it is extremely difficult to keep track of loose packing slips, etc. When these items are not merged with the purchase order, they cannot be reviewed to determine whether or not some purchase orders are ready for payment.

The present system leads to a misconception. It appears that the current practice confuses payment with the recording of the incurrence of a liability. By the transfer of title, through receipt of goods by the hospital and the hospital acceptance of these goods by the receiving department, the hospital has incurred a liability. It should be recorded as such on the day of receipt of goods or at least when the packing slips arrive in the accounting office. This task should be performed daily and the processing for payment should be performed when the other necessary items arrive at the hospital (the invoice, etc.). These two functions are distinct and should not be coordinated hand in hand, for it results in delays of the recording of liabilities and in the payment for goods received because of the huge number of packing slips, invoices, etc. that must be waded through in the desk file to determine if payment can be made. The closing out of the desk file at the end of the month adds to these delays because of the volume of work (vouchers to be typed and entries to be made to the purchase journal) at one time. This could result in errors in computation, and to fatigue for the clerk.

Analysis of Present Filing System

As pointed out above, the desk file, which holds data separate and apart from the purchase orders until the end of the month, leads to confusion rather than to orderliness. It interferes with the clerk's ability to pace her work, because she stores all incoming items here without bringing them together with the purchase order. If she did, it would be determined what has actually been received and what is ready to pay or to be entered in the purchase journal prior to the end of the month so that the workload could be leveled out. And, she would know by review with the purchase order what to clear out. Therefore, it is felt that the source of this confusion - the desk file - should be eliminated.

As related in the present system section, four separate files are maintained for "open" purchase orders (those not yet processed for payment). In addition, one more file could be included in this "open" classification if the purchase orders on which partial payment has been made are considered. They are currently filed away numerically in the "closed" purchase order file. The separation of data, all of the same nature (i.e., "open"), into five independent files certainly is not conducive to the efficient processing of accounts payable information. The accounts payable clerk incurs difficulties and extra work due to this filing system because:

- 1) She must maintain these files
- 2) She cannot locate purchase orders (i.e., which file is it in)
- 3) There are not enough letter guides in any one of the files
- 4) There isn't any numerical filing (by purchase order number)

Layout

In studying the present layout of the Accounting Office, it was found that the location of the storage files for accounts payable data is

situated too far from the accounts payable clerk's desk. The files are in the path of people entering and leaving the office so that disturbances arise when this occurs. The information stored in these files (files A thru D) is subject to repeated retrieval. These files should be nearer to the accounts payable clerk so that she may work in an efficient manner free of interruptions. It was further determined that the accounts payable clerk's desk should not be situated so that she faces the other clerk. This leads to discussion of irrelevant topics which break the trend of thought and concentration vital to the accounts payable clerk in performing her work. She must process data, compute discounts, and prepare vouchers so that payment may occur within the terms of the discounts, etc., and accuracy and timeliness is an important factor.

Purchase Order Form

The purchase order form currently used is a source of aggravation to both the Purchasing and Accounting departments. Copy 7 of the purchase order is sent to the accounts payable clerk along with copies 8, 9, and 10 (the hospital voucher), and she must file these in a Pendaflex file system. Copy 7 is made of light-weight paper and is unable to support its own weight when filed in an upright position. They are filed on their sides, making the possibilities of rapid retrieval unattainable.

As mentioned, the hospital voucher (instrument for payment) is currently a part of the purchase order form. When the clerk in the Purchasing Department is initially preparing the purchase order, she begins by typing the vendor's name and address. Since this is the extent of the information which could be transferred to the voucher at this point, she must stop typing, roll back the typewriter, and remove the voucher

before continuing to add any more information to the purchase order. Upon completing the remainder of the purchase order, Copy 7 is then attached to the voucher before it is sent to the Accounting department. All this is an unnecessary waste of time and effort for both the person preparing the purchase orders and the accounts payable clerk who receives these items. With respect to the purchasing clerk, there is no need here to have a voucher numbered the same as the purchase order, therefore, her time is wasted in stoppage of her workflow to tear off the voucher and handle it. For the accounts payable clerk, when vouchers are prepared, she frequently lumps a number of purchase orders on one voucher, leading to a forms waste for those initially prepared by purchasing and not used in Accounting. The addresses of vendors for placements of orders is often different from that for submitting of remittances. This contributes to an additional forms and time waste.

Lastly, there should be additional provision on Copy 7 of the purchase order to assist in the routing of the purchase order through the accounts payable system.

Other External Factors

It should be mentioned that so far the evaluation of the present system dealt with only factors which could be arranged by the hospital to suit its desires. However, interferences from other outside forces can and do drastically affect the accounts payable function. Not from the point of view of the recording of liabilities but rather with the timeliness of the reductions of those liabilities. Since this governing factor is external to the hospital (the City of Highland Park) we could not examine and recommend any changes as to its methods and systems employed to restrict the hospital. But, it is possible to view the city's

control and weigh objectively its effects on the relationship and rapport carried by the hospital with respect to its suppliers.

It was inferred in the present system section that the average minimum number of days that the hospital could possibly process through a voucher, from the date of the voucher to the date of receipt of check as prepared from the voucher, is twelve days. This is a direct result of the channels used to prepare and issue checks from City Hall. The Controller prepares a list of claims and accounts for presentation to the City Council on Monday evenings. To have this list prepared in time for Monday, all vouchers from the hospital (to be paid that week) must be at City Hall no later than Thursday afternoon. The checks are dated after the Council meeting (usually dated on Tuesdays) and do not arrive at the vendor until at least an average of seven days have elapsed between the check date and receipt by the vendor. It behooves us to conceive that a time lag of this magnitude is justified or even understand how it is at all possible. It is most critical that this situation be remedied. If it continues the hospital cannot take, and has often foregone, the opportunity to engage in terms of discounts which specify x% in ten days. The reason for this is that it is virtually impossible for the hospital to pay within these terms, and in fact it often misses on 30-day terms due to delays with the present system at the hospital and complicated by this extremely long time lag at City Hall (12 day average minimum to a possible average of an 18 day lag if a voucher were prepared and sent to City Hall on Friday of a week). In fact, it is estimated that the hospital has lost approximately \$325.00 within the past 4 months (January 1967-April 1967) by 1) foregoing "good" discount terms because in good faith the hospital could not stick to the terms of the sale because of these time lags and "hold-ups" at City Hall, or, 2) by not taking discounts because it has either processed the invoice at a time beyond the discount terms

or have had the vendor demand the discount reversed, after the hospital had taken the terms.

An analysis of the hospital vouchers indicated that 90% of all discounts (other than the x% on payment) are taken after the terms of the discount have expired. While nearly all of them are vouchered before expiration date, the time lag between preparation and issuance of checks at City Hall extends the time gap over into the expired stage. Therefore, legally, 90% of all discounts taken by the hospital (with the exception of those mentioned above) could have been disallowed by the vendor. Or, approximately \$2,500.00 per year could be lost if the vendors would force the hospital to comply with the terms of discounts.

An interesting observation concerning preparation of vouchers for vendors offering discount terms on payment was made. There is an average time lapse of around two to four months between the receipt of invoice and the date the voucher was prepared. In fact, up to 8-12 month gaps were discovered. This apparently occurs because there isn't any time stipulation which must be observed. Therefore, these vendors are neglected because the discount is taken regardless of when the vouchers are prepared. The vendor who typically offered these specific terms to the hospital was usually one who dealt in large volume with the hospital. Certainly, just because they submit a lot of invoices, and offer discount terms that can be met on payment, does not mean that they should be brushed aside when it comes time to submit payment. If the hospital were to lose these favorable terms, it would mean an immediate cost between \$2,000 to \$3,000 that could realistically be lost on the discount alone each year. Unfortunately, however, this isn't the only cost that would be incurred if these large volume vendors were lost. A conservative, accurate estimate of between \$8,000 to \$10,000 per year could very conceivably be lost if the hospital were to sever relationships with their volume suppliers.

These firms offer tremendous discounts off list price, which cannot be matched. The rapport carried by the hospital with these suppliers should not be jeopardized through slow, neglectful remittance to these vendors. If these suppliers were lost, it would be at a tremendous cost to this institution.

Another important fact which has extreme implications and effects on the rapidity with which vendors receive payment is the requirement of the invoice-voucher. This particular instrument is antiquated and, as was estimated, between \$2,000 and \$3,000 could be saved annually in clerical costs if it were eliminated.**

This invoice-voucher, copy 2 of the purchase order, must be signed, notarized, completed on face side, and returned to the hospital before a voucher can be prepared for payment. The consequences of this are excess time lags between receipt of goods and invoice and payment on that invoice. Vendors are confused as to what they should do with this document. In fact, some vendors will not even deal with the hospital because they feel that this voucher is too much aggravation and adds to their cost of doing business with the hospital. When this document is lost (because vendors frequently don't know what to do with it, or if the location of the vendor's sales branch is separate from the company's billing division it is easily lost) additional work is incurred on the part of the accounts payable clerk. She follows up on the purchase orders by preparing and mailing a purchase expeditor (check-off form used to inform vendors to comply with some requirements before they will receive payment). However, this is not the only fault with this invoice-voucher. In interfering with the timeliness of payment, it creates poor relationships between the accounts payable department and the vendors.

**Per Mr. R. W. Hunsaker's petition to the Mayor and Council, City of Highland Park, October 28, 1966.

Frequently, situations arise where the vendor will disallow a discount because the hospital did not pay within the time limits, however, they could have paid if the invoice-voucher were returned on time. This generates conflict between the accounting office here and the vendors. This situation should not be permitted to continue.

In addition, there is currently in effect the restriction to a \$500 limit on each purchase order. While this stipulation isn't critical with respect to the accounting office, the policy drawn from it is. The City Controller, with respect to the preparation of vouchers and the payment or issuing of checks, will not allow either of these to exceed that \$500 limit on purchase orders. Since the Charter of the City of Highland Park makes absolutely no reference to limits on the amount of payment to be remitted to vendors, it is rather ridiculous to support or interpret that purchases have anything to do with amounts in payment for purchases from any one vendor. If instead of paying a supplier with one check for 10 items (purchased under 3 separate purchase orders of \$500 each) costing \$1,500.00, the current policy forces the accounts payable clerk to prepare two additional vouchers instead of one to cover this liability to a particular vendor. Not only does this add to costs here at the hospital (even in Purchase Order forms) for paying for the extra time taken to prepare these additional vouchers, but there is also wasted time and effort at City Hall in preparing checks. This time loss at the hospital amounts to approximately \$250/year, while at City Hall to about \$300/year (based on the conservative estimate of 30¢ per check). Also, this does not take into consideration savings which would accrue if the copy #2 of the purchase order (the invoice-voucher) were eliminated, since it provides no real control and only leads to increased costs.

In particular, if this unnecessary stipulation were lifted, it would tremendously augment relationships with those vendors with which the hospital

has standing orders or deals with in large volume, both dollarwise and
crisiswise (e.g., G. A. Ingram).

To do business with these companies, the hospital must supply them with
many extra invoice-vouchers because of the huge numbers of partial shipments,
etc. wherein they submit an invoice and also an invoice-voucher, if they wish
payment covering that invoice. If this step were eliminated the forms savings
alone would be \$250/year. Relieving the hospital's vendors of this unnecessary
requirement would immediately enhance relationships with vendors. It would:

- 1) Permit faster more timely remittance to supplier;
- 2) Allow the purchasing department the opportunity to deal with suppliers which presently will not
transact business with the hospital; and
- 3) Reduce time lags in the payment procedure, thereby creating a favorable atmosphere for negotiating "good"
discount terms with vendors who now dislike doing business with the hospital
because it "ties up" too much of their money.

PROPOSED SYSTEM

The recommended changes necessary to effect a current, representative, accounts payable system are presented below. It will be followed by those steps or procedures that will make this system both operative and feasible.

In order to establish procedures for the accounts payable function, certain physical changes must be made with respect to the layout of the Accounting Office. These changes (rearrangement of office equipment) are shown in Appendix D, p. 35. Essentially, they are as follows:

- 1) Turn the accounts payable clerk's desk around so that she faces the opposite direction. With this, filing cabinet "D" (as shown on the layout) will be permitted to be moved and placed to the right of her desk.
- 2) File cabinet "D" will now be used to store all "open" purchase orders in one continuous file, not five individual files. This means that all "open" purchase orders will have to be removed from their present individual file locations and merged into one file.
- 3) In line with the preceding change, the desk file should be discontinued. And,
- 4) Creation of an "exception" file should be effected to store all invoices from vendors who offer discounts to the hospital. This small file should have provisions for storing invoices due on days 1 - 31.

Recommended Filing Arrangement

To enable all of the "open" purchase orders to be filed in file cabinet "D", the following file procedure should be adopted utilizing the "Pondaflex" file system. According to an estimate provided by the Purchasing Department, the highest volume vendors have been selected from the suppliers of the hospital. The accounting office should provide individual files for each of these. Fifty-nine have been picked as representing the most purchase orders (both in dollars and number issued), and they appear in Appendix E, p. 36.

The following example will suffice in setting up the file. The names of the following vendors are taken from those shown in Appendix E.

Abbott Laboratories
Armour Foods
"A" Miscellaneous
Boescher, Peck & Lewis

etc.

To further achieve rapid retrieval of purchase orders, they should be filed vertically with the purchase order number in the upper right-hand corner and in ascending numerical sequence. The additional "miscellaneous" file guides will bring the total file divisions to 85. The accounts payable clerk, however, should create a new position for any vendors which may in the future be dealt with on a volume basis. If any important ones have been left off the list, she should likewise provide for them. The use of color coding may also be desired to visually set off those vendors who, for example, offer discounts to the hospital. The terms of these discounts may also be typed on the tabs.

Purchase Order Form

To make the above recommendation feasible, however, certain changes will have to be made in the purchase order form. The accounting copy (#7) should be made of card stock (similar to the ledgers in the Business Office) so that the necessary strength will be provided to file the purchase orders vertically. And, as indicated previously, the hospital voucher should be removed from the purchase order snap-set. The voucher should be pre-numbered sequentially by voucher number instead of purchase order number. When using these vouchers, if one is ruined, it should be voided and entered in the voucher register as such, so that they will all be accounted for.

This form should now originate in the Accounting Office resulting in a time savings to both the Purchasing and Accounting Department. Also, there will

be the forms saving as defined in the "Evaluation Section". An example of the new Copy 7 of the purchase order can be found in Appendix F, p. 37. Shown on the form are provisions permitting visual determination of what items are missing or "holding up" the purchase order from payment processing. The proposed voucher may be found in Appendix G, p. 38.

Other In-Hospital Recommendations

To assist the accounts payable clerk in rapidly processing data, the Purchasing, Laboratory, and Pharmacy (all receiving points) should process all packing slips (receivers) through to the Accounting Office as quickly as possible. They should match up all packing slips etc. with their copy of the purchase order or requisition to determine quantities. This should be followed with stamping them with the date received and the person checking quantities should initial the form. At the end of every day, those packing slips received and ready to be sent to Accounting, should be delivered personally, by the receiving clerks of the respective departments, to the Accounts Payable clerk. Since deliveries are not to be made after 4:00 p.m., this should permit ample time to process the receivers through and deliver them to the Accounting Office. This will allow time for the accounts payable clerk to begin posting to the purchase journal at the end of the day and finish the following morning.

Lastly, it is very important that if any department accepts (receives) goods for which the packing slip or receiver is missing, they should immediately make one up for the goods and process it through in the above manner. This is a must if the hospital is to maintain a smooth effective accounts payable system and enable them to head off future conflicts with vendors who demand payment from the hospital for supplies when the accounts payable clerk has no knowledge of the receipt of goods.

Processing Procedures

Examination of the graph in Appendix C, p. 35, as mentioned, reveals that some means should be instituted to level the workload of the accounts payable clerk. There are "peaks" and "lows" which reveal that the present system is not helping her to spread her work out and make it less of a chore, especially at the end of the month. The graph should be as straight as possible and one way to effect this would be to permit the clerk to post entries to the purchasing journal daily. In this manner, the liabilities of the hospital, at any point in time, will be known and control can be effected over the limits of these liabilities. Posting entries to the purchase journal daily will alleviate the end of the month rush to close out the purchase journal so that financial statements may be prepared. This will permit the accounts payable clerk to process more vouchers early in the month, for essentially there will be no closing down of her job to clear out her desk file. Under this system she would now have time to type vouchers and perform other functions as filing, because the system will pace and space out her work and turn it into "more or less" a routine.

The steps which she should follow are:

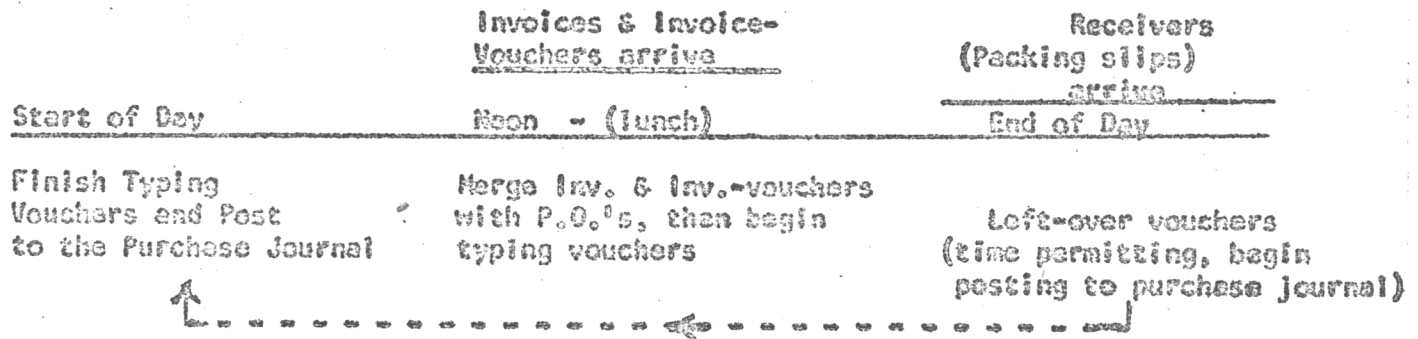
- (1) As packing slips (receivers) arrive from the receiving departments, they should be matched with their respective purchase orders. And, under the terms of the purchase order, the dollar amounts should be entered in the purchase journal at the net amount (i.e., take discount if one is offered). In like manner, the amounts of invoice-vouchers coming from the Business Office, Medical Education department, and the other direct charge departments, should be entered the same day they arrive from these departments.
- (2) The packing slip should be filed away with the purchase order and attached to it by staples. Unless, of course, it is ready to voucher, and then

It should be held out and a voucher prepared for it. In case it isn't ready for payment, the necessary checkmark should be placed on the top of the purchase order so that in viewing the face of the purchase order, one can determine what lacks for payment processing.

(3) When invoices and invoice-vouchers arrive via U.S. mail, they should be matched with the purchase orders to which they belong. And, if the receiver is present, and either the invoice-voucher has arrived with the invoice or if it is already present, the purchase order should be pulled and payment on the invoice should be processed through by preparing the voucher. No payment should be withheld if it can be made at this time. That is, whenever all of the requisites for payment are present, a voucher should be prepared that day. However, in the case of invoices arriving from a vendor offering discount terms, the invoice should then be filed in the small discount file. The day under which it should be filed will have to be determined by the accounts payable clerk. It should be filed on a date that will provide enough lead time to enable the check to be prepared and mailed to the vendor, (i.e., enough lead time allowing time for the preparation of the voucher and sending it to City Hall). On any day, the accounts payable clerk should go through the discount file and pull those invoices which would have to be processed on that date to enable the remittance to arrive at the vendor within the time limits of the terms of discount offered. In the case where some necessary items (packing slip, invoice-voucher, etc.) are not present, she should notify the vendor that if they expected to be paid within the terms of discount, they should deliver the goods or return the required invoice-voucher, otherwise they should not have billed the hospital if either of those two items were not at the hospital or attached to the invoice (in the case of the invoice-voucher).

To further explain the above changes, it should be noted that the serialization process should be maintained, however, the time stamping of invoices, invoice-vouchers, and receivers should be discontinued. But, the accounts payable clerk should begin dating the purchase journal.

The workflow or schedule of the accounts payable clerk should follow the general time graph below.



Her work should follow this cycle daily. This will alleviate the undesirable aspects of the present system, such as not knowing current liabilities till the middle of the month following closing of the purchase journal. It will also level out the processing of vouchers which will be effected by the daily entry to the Purchase Journal and the daily preparing of vouchers for all purchase orders on which it is possible to make payment, and reduce the risks or chances of losing suppliers of goods and services.

Another benefit of this new system is the entering to the purchase journal at net amount (gross less discount) at the time of receipt of packing slip instead of when the voucher was being prepared. In this system, entry at net could mean one of two procedures will be followed. When it comes time to pay a vendor through the preparation of a voucher, if the discount is not taken, the entry to the voucher register should be as in (1) below. When the discount is taken, the entry will be as in (2) below:

	Total amount of Voucher	Discount Lost	Discount Taken
1. Any Vendor	\$ 1000.00	\$ 100.00	-
2. Any Vendor	\$ 1000.00	-	\$ 100.00

Instead of the method of only showing discounts taken, both will be recorded. This means that when the accounts payable clerk is preparing vouchers and one is for a vendor offering a discount, then she knows that the net figure was entered in the purchase journal. So, she will prepare the voucher for the amount to be paid. The difference between gross and net should be recorded in the voucher register as discount lost or discount taken, since this information is informative in both cases. At the end of the month, the total of the discounts lost column should be shown on the financial statement as an administrative expense, since presumably it is the responsibility of administration to see that obligations of the hospital are paid within the discount period. Therefore, when the clerk computes the discount for entry to the purchase journal, she should staple her adding machine tape to the invoice showing the gross, discount, and net amount figures.

Outside Factors

A disturbing point which must be remedied as soon as possible, with reference to the impact of the controls of the City of Highland Park, is the excess time lag between the submission of hospital vouchers and the receipt of checks by vendors. Under the present conditions, City Hall makes it virtually impossible for the hospital to pay within the terms net-10 days. This, along with the other factors presented in the "Evaluation Section", the requirement of the invoice-voucher, City Council's approval of all checks issued, and the \$500 limit on vouchers and purchase orders, are all rather formidable problems which must be overcome if the hospital is ever to become current with respect to systems designs. Community Systems Foundation, however, suggest the following alternatives which administration may pursue if they desire relief from the problems facing them. For instance, threats on the part of vendors to "cut-off" supplies to the hospital unless they get at least near current on payments. Or, missing on discounts and foregoing favorable offers because in "good faith" the hospital knew it could never meet the terms of the offers.

Possible Solutions

(1) Eliminate the invoice-voucher on the grounds that it provides no actual control or any other purpose, except becoming a nuisance and adding to costs at the hospital, City Hall, and the vendor. This will do much to speed payment to vendors and open opportunities to deal with suppliers who will not currently deal with the hospital because of the cumbersome invoice-voucher.

(2) Attempt to eliminate the approval for payment (i.e., Council's approval of claims and accounts). Council's approval possesses nothing at all in the way of control, and only leads to excessive time delays in the payment process. Since the City Council already approves all purchases of Capital Items (and any contracts over \$500), the hospital is "locked in" on purchase contracts once it accepts the goods. It appears, therefore, inconsequential whether or not Council approves something for payment when there is no other alternative for the hospital except to pay, since they are committed. Of course, the hospital could break the contract and send the goods back to the vendor and suffer the consequences. But, this ridiculous step should be avoided.

Council may still review what and who is being paid through the preparation of the List of Claims and Accounts. If they observe some action on the part of one of the city branches of which they disapprove, they may take corrective action to curtail them from pursuing future courses in the same direction. The argument is that once the hospital is obligated to pay, due to acceptance of goods on prior approval of City Council to enter into the contract, it is futile to attempt to control or stop payment after the hospital is committed or legally responsible for the goods. The only place where approval and control will have any effect is prior to the issuing of purchase orders, not after something ordered has been received or performed. At this point it is too late. Therefore, all checks should

be prepared and issued daily in the same manner as vouchers will be prepared at the hospital. The amounts thereof may be presented to the City Council for review. In essence, the argumentation here is, since Council already approves the purchase order, why should they, since the hospital is committed to pay, interfere with the payment or issuance of checks. This should simply be audited by the Controller and subject to the review of the City Council.

(3) The preceding alternative suggests that all vouchers arriving at City Hall should be processed and a check issued to the vendor daily. If this is not agreeable, at least the processing of those vouchers in payment to vendors offering discount terms should be adopted. That is, create exception conditions so that payment before expiration of the discount periods may be effected. Then, these checks could be listed in a separate section in the claims and accounts listing, and subject to the review of Council.

COMPARISON AND SUMMARY

Present vs. Proposed System

Present Procedures

- A. Packing slips (receivers) arrive at Accounting office and are time stamped and filed in desk file alphabetically
 - B. Invoices and invoice-vouchers arrive and are time stamped and filed alphabetically in desk file.
 - C. Vendors who offer discounts are reviewed first and if payment can be made against any purchase orders issued to them, the liability is recorded in the purchase journal and a voucher is prepared.
 - D. Time permitting, the other vendors' purchase orders are reviewed to see if payment could be made to any of them. If so, the liability is recorded in the purchase journal and a voucher is prepared.
 - E. For all items remaining in desk file at the end of the month, the liability is recorded in the purchase journal for those items received and ready for payment and for those received and some necessary item lacking for payment to be made.
- Vouchers are prepared for those ready for payment, and the remainder of the purchase orders are filed away.

Proposed Procedures

- A. Packing slips (receivers) arrive and are matched with their respective purchase orders, the discount computed if any offered, and the liability is recorded in the purchase journal. The packing slips are then stapled to the purchase orders and filed away. Purchasing should type the terms of contract on each purchase order issued.
- B. Invoices and invoice-vouchers arrive and are merged with their respective purchase orders. If receiver is present, purchase order is pulled and a voucher is prepared for it. Invoices and invoice-vouchers pertaining to vendors offering discounts are filed in small file by date due (i.e., date when voucher should be prepared in order for remittance to arrive at vendor in time to take advantage of discount terms.)

Present File System

vs.

Proposed File System

- A. Desk file, kept in drawer, used to file all receivers and invoices, etc. alphabetically.
- B. Open purchase orders are filed alphabetically in five separate files.
- C. One "closed" file with both "closed" and "open" purchase orders being filed here simultaneously.
- D. Purchase orders are currently filed horizontally with the hospital voucher paperclipped to it.

- A. Desk file is eliminated and invoices etc. are filed directly with their corresponding purchase orders.
- B. One "open" file is kept for all purchase orders. The purchase orders are filed alphabetically, and in ascending numerical sequence. Special provisions are made to file high volume vendors separately.
- C. Same "closed" file should be maintained, except "open" purchase orders will be re-filed in the "open" file.
- D. For additional control over discounts, a small exception file will be maintained for invoices possessing discount terms.
- E. Purchase order will now have copy 7 (accounting department copy) made of card stock, permitting them to be filed vertically. Also, the voucher will originate in the accounting office and not be attached to the purchase order.

Present Layout

vs.

Proposed Layout

A. Files too far from accounts payable clerk and in the way of people walking through the office.

A. File used most frequently is alongside accounts payable clerk's desk and away from disturbances. Desk now facing wall instead of other clerk.

In summary, the proposed system will achieve conditions favorable and conducive to effective, efficient work methods. It will generate timely payments to vendors where real speed and promptness will produce a favorable atmosphere with vendors and open new doors in negotiating purchase contracts. This will be effected by the proposed system because its basis is payment when conditions for payment occur; that is, when all items required for the preparation of the vouchers are present, the voucher will be prepared that day. This is possible because the function of recording liabilities in the purchase journal will now be performed when the liability has been incurred, (i.e., when title to goods has been transferred) - the day of acceptance of the goods, etc. by the hospital. This step alone will permit the accounts payable clerk time enough daily to process vouchers for payment when the requisites for payment are present. Coupled with the proposed filing system, changes in the purchase order, and procedure renovations, the hospital will arrive at control over the extent of its liabilities. Also, information such as the extent of discounts lost, will now become available to permit tighter administrative control over such a valuable function.

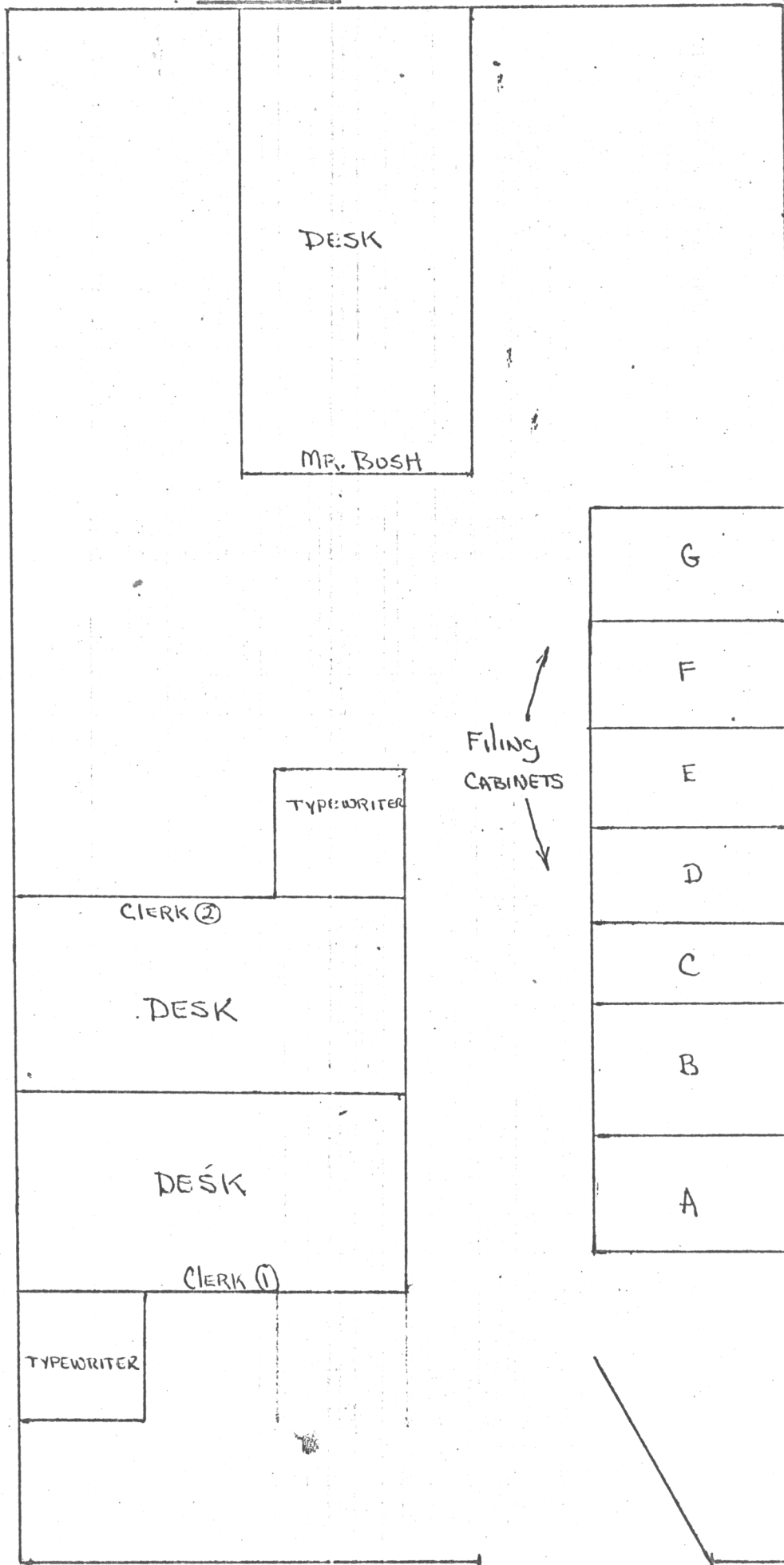
The comparison points out how posting to the purchase journal, preparation of vouchers, and filing will be performed daily. And, that the disposition of any purchase order will be known and action taken on it when conditions are permitting. No work will be permitted to accrue so that at a later date an overwhelming sum is piled upon the clerk to process through in a few days. If this system achieves nothing at all, it will at least provide the accounts payable clerk the opportunity to have her work paced and separated sufficiently

relative to time to enable her to work efficiently. She will know the status of every purchase order (i.e., is it ready for payment, "open", "closed", etc.) This system will generate the estimated costs savings as stated in the "Evaluation Section", of approximately \$3,300 per year in the hospital alone. There are also cost savings at City Hall if they would drop the policy of not issuing checks to exceed \$500.00. These savings would accrue if all recommendations presented in this report were implemented. There are many intangible benefits and incalculable costs savings which will result, as pointed out in the body of this report, if this system were implemented.

APPENDICES

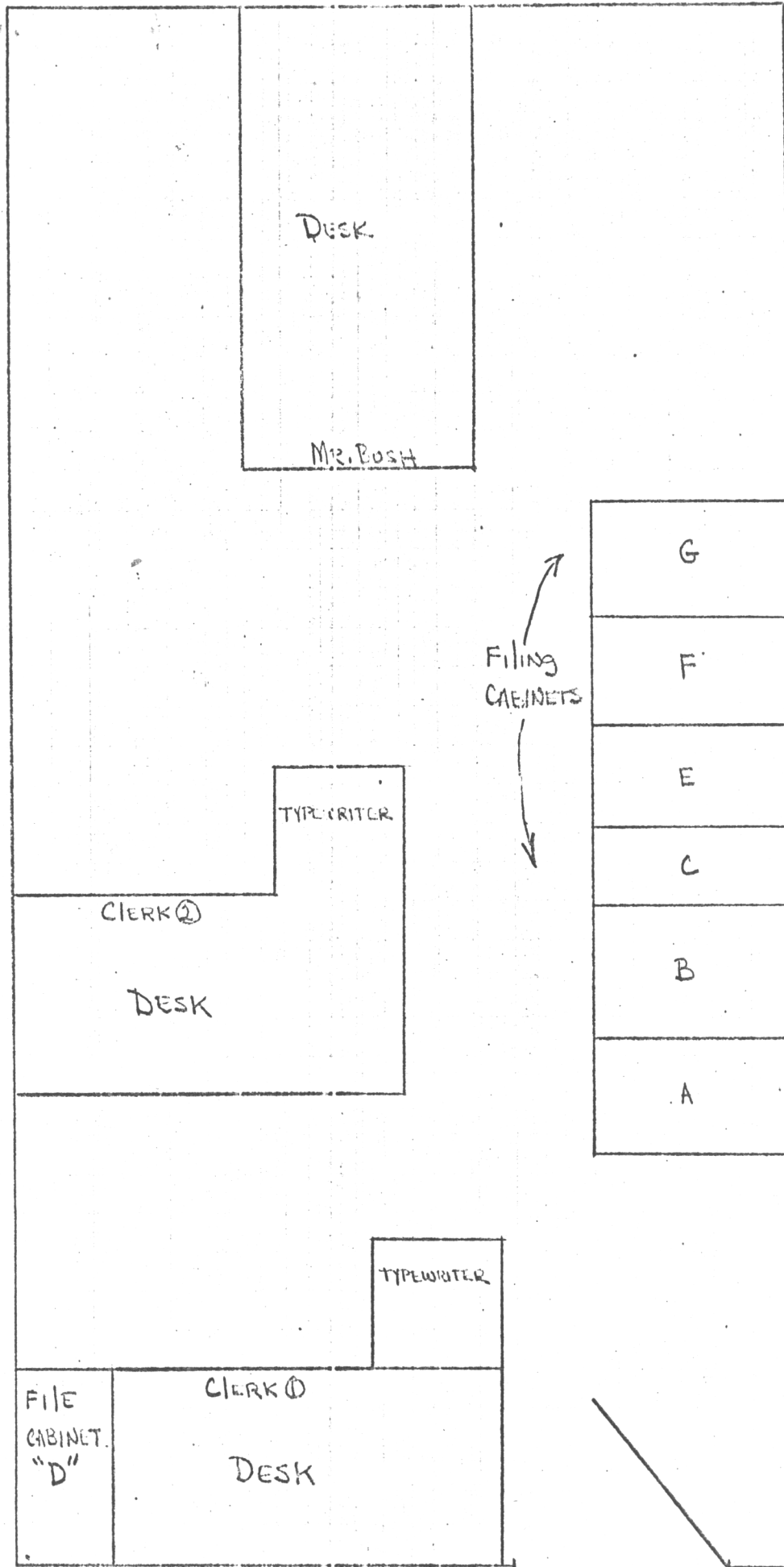
	Page
A. Present and Proposed Layouts	32 - 33
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E. High Volume Vendors	36
F. Proposed Copy 7 of Purchase Order	37
G. Proposed Hospital Voucher	38

APPENDIX A.



PRESENT LAYOUT - ACCOUNTING DEPARTMENT

$\frac{1}{2}'' = 1'$



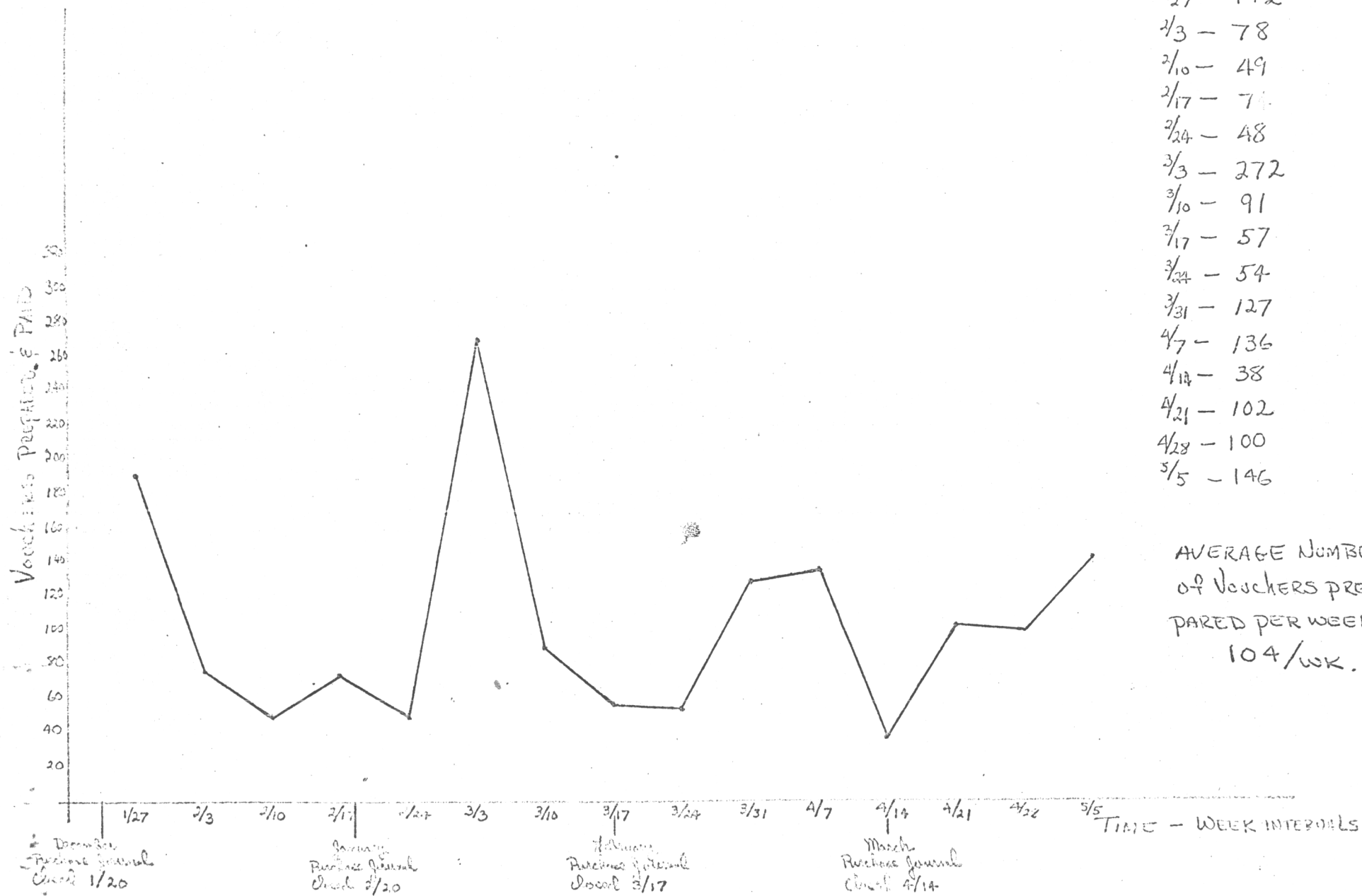
PROPOSED LAYOUT - ASSISTANT DEPT.

1/2" = 1'

APPENDIX B

ANALYSIS OF C.S.F.'s RECEIPT OF CHECKS

1	2	3	4	5	6
Voucher Date	Check Date	E.T. (1-3)	CSF Rec'd Check	E.T. between 2 & 4	Total Elapsed Time (1 - 4)
4-25-67	5-2-67	7	5-9-67	7	14
4-25-67	5-2-67	7	5-9-67	7	14
3-8-67	3-14-67	6	3-22-67	8	14
1-10-67	1-31-67	21	2-7-67	7	28
12-16-66	1-4-67	19	1-13-67	9	28
11-29-66	12-6-66	7	12-12-66	6	13
11-14-66	11-22-66	8	11-28-66	6	14
10-28-66	11-9-66	12	11-15-66	6	18
8-10-66	8-16-66	6	8-24-66	8	14
6-20-66	-	-	6-30-66	-	10
5-20-66	-	-	6-20-66	-	30
4-25-66	5-3-66	8	5-11-66	8	16
3-18-66	4-22-66	35	4-27-66	5	40
Average Elapsed Time		12.36 days		7 days	19.4 days



APPENDIX E

High Volume Vendors

Abbott Labs.
Amour Foods
Beecher Pack & Lewis
Fred W. Boyes
Burdett Oxygen
Business Forms Service
Bussings Office Supply
Canada Dry
Ciba Pharm.
City Poultry
Continental Baking Co.
Dorn Fruit & Produce
Excel Products
Jack Gell
R. C. Gibson
Grand Packing
Great Lakes Refrigeration
Highland Park Tobacco
Hono Juice Co.
Independent Biscuit Co.
G. A. Ingram Co.
Instasan Pharm.
Ipco Hospital Supply
Jay Arc Paper Co.
King Coffee Co.
Kuttbauer Mfg. Co.
LaSalle Turner Electric
Lynn Medical Co.
McCabe Drugs
McKesson & Robbins, Inc.
Metropolitan Typewriter
National Cylinder Gas
National Drug Wholesale
Nuclear Consultant Corp.
Ohio Chemical Co.
Ortho Pharm.
Panama Carbon
Parke Davis
Pfizer Lab.
Rupp & Bateman
Scientific Products
Seven Up
S & G Grocery

Sigma Chem. Co.
Silvers Office Supply
Simon & Leeman Co.
Sun Valley Foods
Superior Fish Co.
Tingue Brown Co.
Travenol Labs.
U. S. Industrial Chem.
U. S. Vitamin Corp.
Upjohn
Vernors
Vita-Wheat Bakeries
Wescon Med. Supply
Whitehouse Mfg.
Winthrop Labs
Wyoth, Inc.

ROUTING INFORMATION PER SHIPMENTS RECEIVED

PURCHASE ORDER

H

GENERAL INFO: ☐ DISCOUNT FILE ☐ STANDING ORDER ☐ BACK ORDERED ITEMS

SPECIFIC INFORMATION PER INDIVIDUAL SHIPMENT

SHIPMENT NUMBER:	1.	2.	3.	4.	5.
INVOICE:					
DATE INVOICE FILED UNDER (DISCOUNTS ONLY):					
RECEIVER					
INVOICE-VOUCHER					
OTHER INFORMATION					

PLACE IN
CLOSED
P.O. FILE:
☐
 PURCHASE
 EXPIDITURE
 SENT: ☐


DATE OF ORDER

DELIVERY REQUIRED AT HOSPITAL

AMOUNT SHIPPED IN EXCESS OF QUANTITY SPECIFIED
MAY BE RETURNED AT SELLERS EXPENSEF.O.B.
PAYMENT
ROUTING

SECOND PARTY AGREES TO MANUFACTURE, SELL AND DELIVER MATERIALS SPECIFIED HEREIN,
SUBJECT TO THE TERMS AND CONDITIONS STIPULATED HEREIN AND ON THE BACK HEREOF.

VENDOR'S INVOICE NO.		REQUISITION NUMBER		DEPT.		TERMS	
QUANTITY	ITEM			EXPENSE DISTRIBUTION		UNIT PRICE	AMOUNT

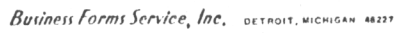
PLEASE ADVISE IF ENTIRE ORDER CANNOT BE FILLED IMMEDIATELY. PURCHASE ORDER
NUMBER MUST BE SHOWN ON ALL PACKAGES, PACKING SLIPS AND INVOICES. RE-
CEIVING OFFICE IS OPEN FROM 8:30 A.M. TO 4:00 P.M. MONDAY THROUGH
FRIDAY. ATTACHED INVOICE-VOUCHER MUST BE COMPLETED (BOTH SIDES),
SIGNED NOTARIZED BEFORE PAYMENT CAN BE MADE. 

DEPUTY PURCHASING AGENT

→ SEE REVERSE SIDE FOR BILLING INSTRUCTIONS AND CONDITIONS

ACCOUNTING DEPT. COPY

THIS ORDER NOT SUBJECT TO MICHIGAN SALES OR USE TAX



HOSPITAL VOUCHER

V-1234

VOUCHER DATE_____

TO

%		DISCOUNT	
1	100	100	0
2	98	98	2
3	95	95	5
4	92	92	8
5	89	89	11
6	86	86	14
7	83	83	17
8	80	80	20
9	77	77	23
10	74	74	26
11	71	71	29
12	68	68	32
13	65	65	35
14	62	62	38
15	59	59	41
16	56	56	44
17	53	53	47
18	50	50	50
19	47	47	53
20	44	44	56
21	41	41	59
22	38	38	62
23	35	35	65
24	32	32	68
25	29	29	71
26	26	26	74
27	23	23	77
28	20	20	80
29	17	17	83
30	14	14	86
31	11	11	89
32	8	8	92
33	5	5	95
34	2	2	98
35	0	0	100

HOSPITAL DIRECTOR