CONSTRUCTION PLANS FOR

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS

TO

THE CITY OF WICHITA, KANSAS

SHAWN BRYAN, P.E. - STORMWATER ENGINEER

OCA NO. 660508

468-84074

GENERAL NOTES:

1. Contractor will be required to provide a minimum advance notice of 48 hours to utility companies prior to starting any excavation as follows:

Kansas One Call	1-800-344-7233

   In the event of emergency, contractor must notify:

Cox Communications	262-4270 or 263-2061
Kansas Gas	263-7511
Westar Energy	264-1141
Aquila Gas	941-1608
SBC Communications	1-571-2611
Wichita Water Dept.	268-4908

2. Utility service lines, poles, valve boxes, meters and etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.

   All suitable excavation shall be wasted on low lying lots within the addition before any material is disposed of off site.

4. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

5. Trees and shrubs in the proposed easement and which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

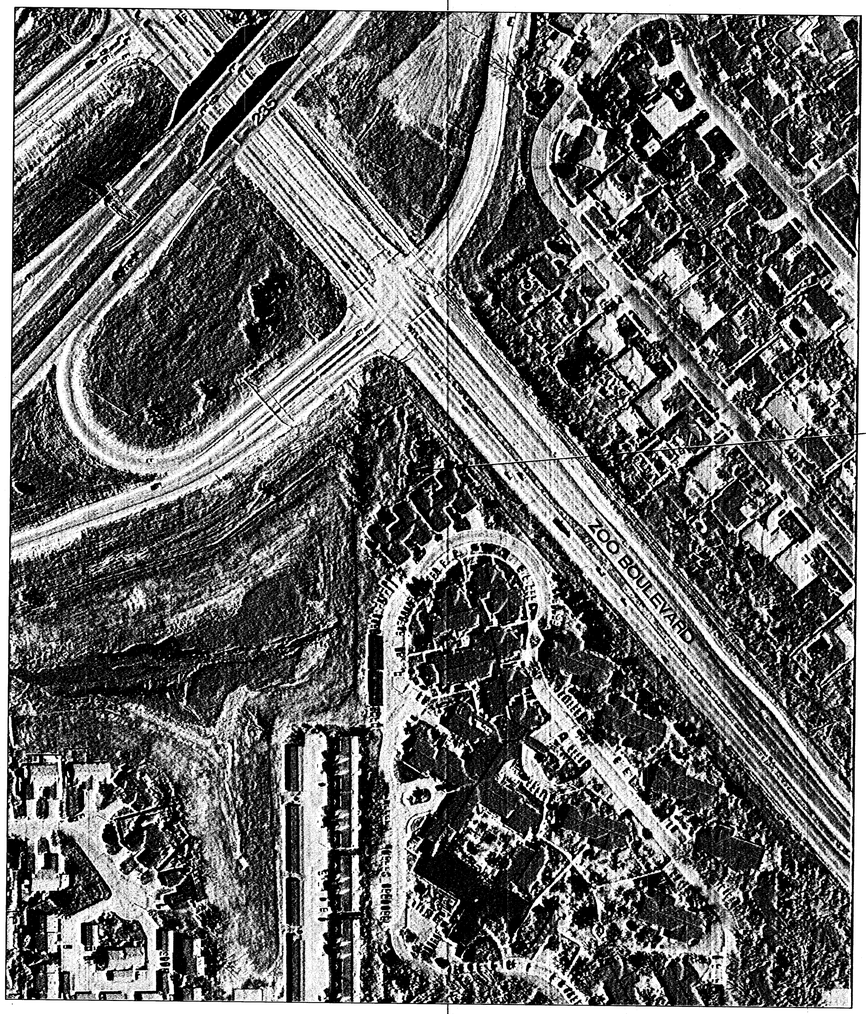
6. The Contractor shall be responsible for preserving property irons. The Contractor will be required to reestablish any property irons which are damaged or destroyed by his construction operations. Such irons shall be reestablished by a licensed land surveyor in accordance with state laws.

7. All disturbed areas shall be seeded with permanent seed (fescue) grass at a rate of 300 lbs per acre.

8. Contractor shall maintain all existing BMPs on project site during construction. Contractor shall repair or replace any existing BMPs that are damaged (cost subsidiary to site restoration). If BMPs were damaged prior to contractor beginning work on project, notify construction inspector or engineer.

9. Contractor shall replace topsoil to a surface thickness of 12 inches on all areas disturbed. Topsoil shall be free from trash, debris and surface vegetation more than six (6) inches in height. After all work has been completed, topsoil shall be placed and graded. (Cost shall be subsidiary to Project)

10. Contractor shall notify Presbyterian Manor one week in advance of construction. 942-7456



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BENCH MARKS

City of Wichita Datum

1. " + " Cut on North side of manhole ring
   Elevation 132.64

2. COW Bench Mark at SE corner of 13th & Anna
   30.20' South of centerline and 49.10' East of centerline
   Elevation 129.11

MARCH 2005

PLANS PREPARED BY

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
5940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone 316/685-4114 ■ FAX 316/685-4444

JAMES M. USHER — 14698 — 3-7-05 — KANSAS — PROFESSIONAL ENGINEER

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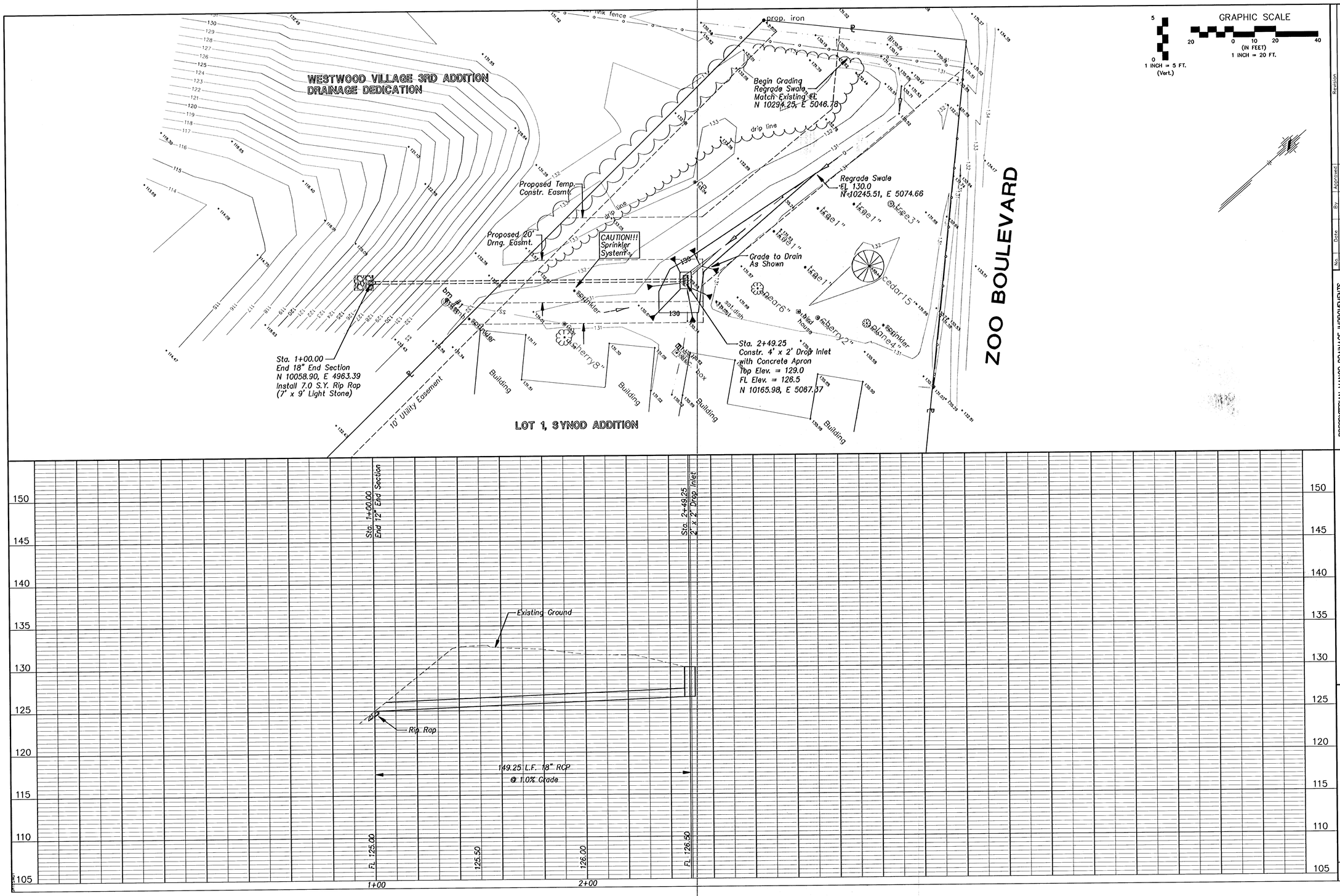

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
STORM SEWER PLAN AND PROFILE
CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. - CITY ENGINEER

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
3940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone 316/685-4114 ■ FAX 316/685-4444

FINAL

Designed By: J. Ubert / B. Kulla
Drawn By: B. Kulla
Poe Job No.: 1827
Date: March 2005

Sheet 2 of 8

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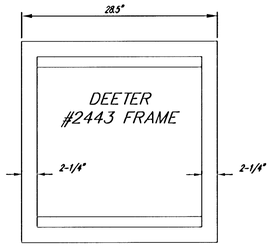
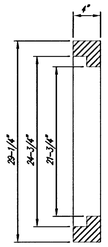
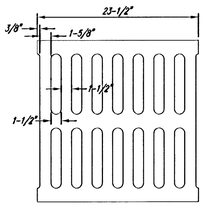
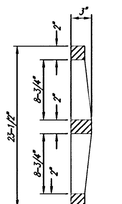




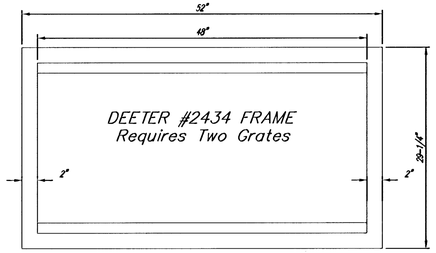


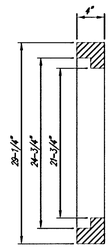
DEETER #2433 GRATE



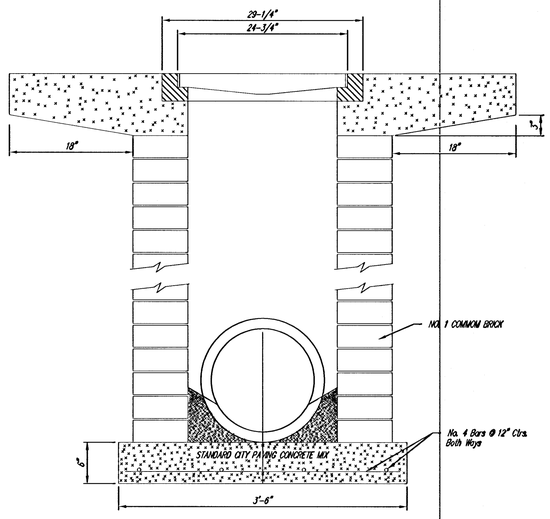
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

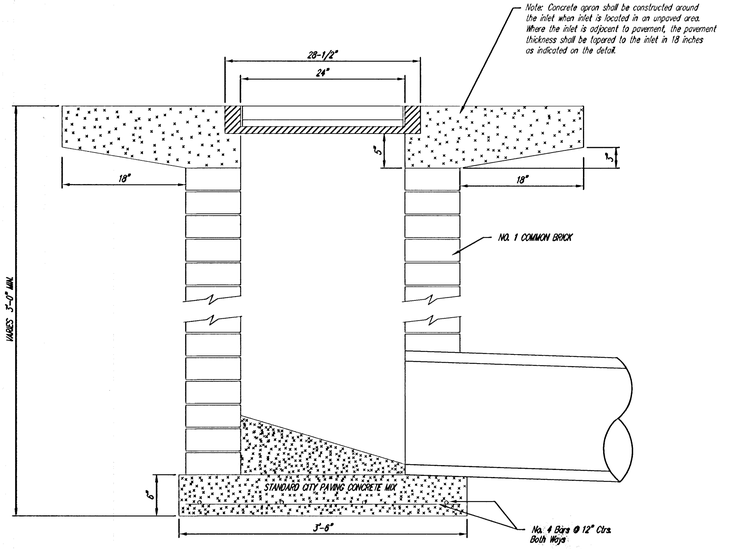
24" x 24" Frame and Grate Detail

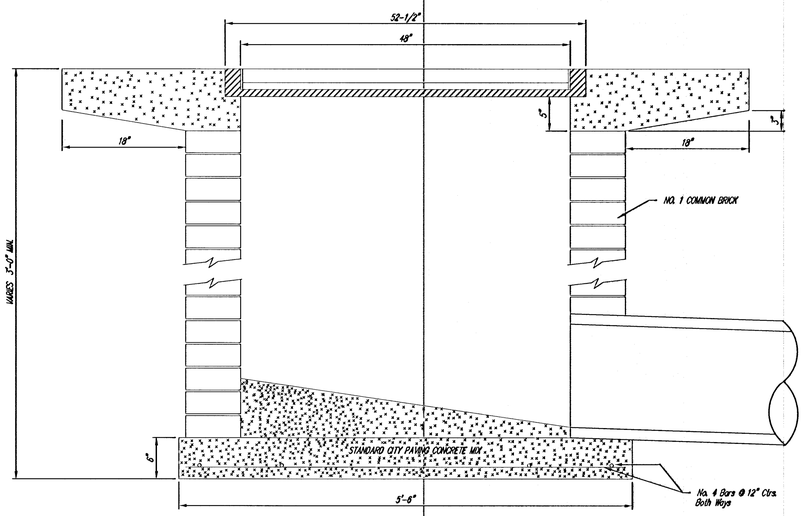


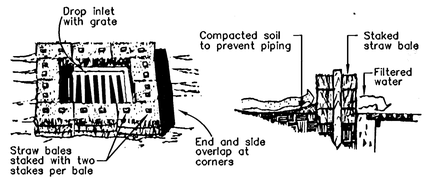


Double 24" x 24" Frame Detail









HAY BALE SEDIMENT BARRIER

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
DROP INLET DETAIL
CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. – CITY ENGINEER

POE & ASSOCIATES, INC.
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FINAL

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Date: March 2005

Sheet 3 of 8

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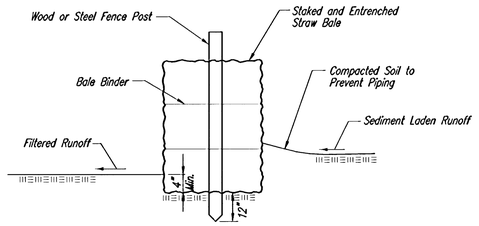


STRAW BALE BARRIERS

Material Specification:

Bale slope barriers may be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for settling out sediment.
When practicable, bale slope barriers should be placed along contours to avoid a concentration of flow.
Bale slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper installation method:

Excavate a trench the length of the planned slope barrier that is 4" deep and a bale's width wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the upslope side of the trench for later use.
Place the bales in the trench, making sure that they are butted tightly. Two stakes should be driven through each bale along the centerline of the ditch check, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground.
Once all the bales have been installed and anchored, place the excavated soil against the upslope side of the check and compact it. The compacted soil should be no more than 3" to 4" deep.

List of common placement/installation mistakes to avoid:

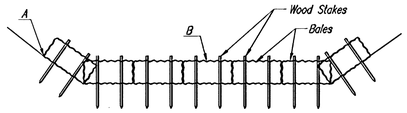
When practicable, do not place bale slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. Concentrated flow over a slope barrier creates a scour hole on the downslope side of the barrier. The scour hole eventually undermines the bales and the barrier fails.
Do not place bale slope barriers in areas with shallow soils underlain by rock. If the barrier is not anchored sufficiently, it will wash out.
Bale slope barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

Inspection and Maintenance:

Bale slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Are there any points along the slope barrier where water is concentrating?
Does water flow under the slope barrier?
Does water flow through spaces between abutting bales?
Are any bales dislodged?
Are bales decomposing due to age and/or water damage?
Does sediment need to be removed from behind the slope barrier?

NOTE: Point A must be higher than Point B so that water flows over the bales and not around them.



STRAW BALE DITCH CHECKS

Material Specification:

Bale ditch checks may be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
Optional: The downstream scour apron should be constructed of a double-netted straw erosion-control blanket at least 6' wide.
Optional: The metal landscape staples used to anchor the erosion-control blanket should be at least 8" long.

Placement:

Bale ditch checks should be placed perpendicular to the flowline of the ditch.
The ditch check should extend far enough so that the ground level at the ends of the check is higher than the top of the lowest center bale. This prevents water from flowing around the check.
Checks should not be placed in ditches where high flows are expected. Rock checks should be used instead.
Bales should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used.
The following table provides check spacing for a given ditch grade:

Ditch Check Spacing

Ditch grade (%)	Check Spacing (feet)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

Proper installation method:

Excavate a trench perpendicular to the ditch flowline that is 4" deep and a bale's width wide. Extend the trench in a straight line along the entire length of the proposed ditch check. Place the soil on the upstream side of the trench-it will be used later.
Optional: On the downstream side of the trench, roll out a length of erosion-control blanket (scour apron) equal to the length of the trench. Place the upstream edge of the erosion-control blanket along the bottom upstream edge of the trench. The erosion control blanket should be anchored in the trench with one row of 8" landscape staples placed on 18" centers. The remainder of the erosion-control blanket (the portion that is not lying in the trench) will serve as the downstream scour apron. This section of the blanket should be anchored to the ground with 8" landscape staples placed around the perimeter of the blanket on 18" centers. The remainder of the blanket should be anchored using two evenly spaced rows of 8" landscape staples on 18" centers placed perpendicular to the flowline of the ditch.
Place the bales in the trench, making sure that they are butted tightly. Two stakes should be driven through each bale along the centerline of the ditch check, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground.
Once all the bales have been installed and anchored, place the excavated soil against the upstream side of the check and compact it. The compacted soil should be no more than 3" to 4" deep and extend upstream no more than 24".

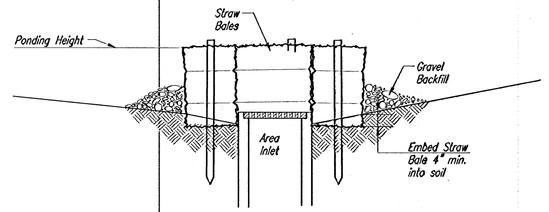
List of common placement/installation mistakes to avoid:

Do not place a bale ditch check directly in front of a culvert outlet. It will not stand up to the concentrated flow.
Do not place bale ditch checks in ditches that will likely experience high flows. They will not stand up to concentrated flow.
Follow prescribed ditch-check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.
Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the check is higher than the top of the lowest center bale.
Do not place bale ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out.
Bale ditch checks must be dug into the ground. Bales at ground level do not work because they allow water to flow under the check.

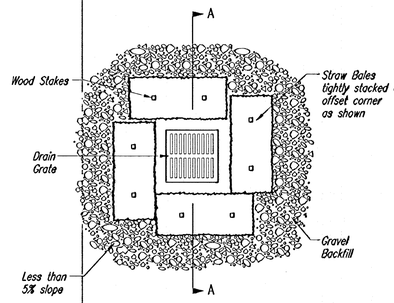
Inspection and Maintenance:

Bale ditch checks should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow around the ditch check?
Does water flow under the ditch check?
Does water flow through spaces between abutting bales?
Are any bales and/or scour aprons (optional) dislodged?
Are bales decomposing due to age and/or water damage?
Does sediment need to be removed from behind the ditch check?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

Material Specification:

Bale area inlet barriers should be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

Bale area inlet barriers should be placed directly around the perimeter of a drop inlet. When a bale area inlet barrier is located near an inlet that has steep approach slopes, the storage capacity behind the barrier is drastically reduced. Timely removal of sediment must occur for a barrier to operate properly in this location.

Proper Installation Method:

Excavate a trench around the perimeter of the area inlet that is at least 4" deep by a bale's width wide.
Place the bales in the trench, making sure that they are butted tightly. Some bales may need to be shortened to fit into the trench around the area inlet. Two stakes should be driven through each bale, approximately 6" to 8" in from the bale ends.
Stakes should be driven at least 12" into the ground.
Once all the bales have been installed and anchored, place the excavated soil against the receiving side of the barrier and compact it. The compacted soil should be no more than 3" to 4" deep.
Note: When a bale area inlet barrier is placed in a shallow median ditch, make sure that the top of the barrier is not higher than the paved road. In this configuration, water may spread onto the roadway causing a hazardous condition.

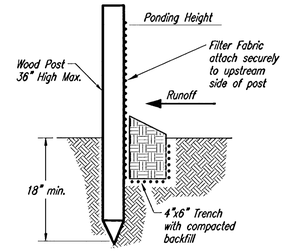
List of common placement installation mistakes to avoid:

Bales should be placed directly against the perimeter of the area inlet. This allows overtopping water to flow directly into the inlet instead of onto nearby soil causing scour.
Bale area inlet barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

Inspection and Maintenance:

Bale area inlet barriers should be inspected every 7 days and within 24 hours of a rainfall 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow under the area inlet barrier?
Does water flow through spaces between abutting bales?
Are any bales dislodged?
Are bales decomposing due to age andlor water damage?
Does sediment need to be removed from behind the area inlet barrier?



SILT FENCE BARRIERS

SILT FENCE BARRIERS

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement:

A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for settling out sediment.
When practicable, silt fence slope barriers should be placed along contours to avoid a concentration of flow.
Silt fence slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper installation method:

Excavate a trench the length of the planned slope barrier that is 6" deep by 4" wide.
Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the upslope side of the trench for later use.
Roll out a continuous length of silt fence fabric on the downslope side of the trench.
Place the edge of the fabric in the trench starting at the top upslope edge. Line all three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt-fence fabric should remain exposed.
Lay the exposed silt fence upslope of the trench to clear an area for driving in the posts.
Just downslope of the trench, drive posts into the ground to a depth of at least 18".
Place posts no more than 4' oport.
Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

List of common placement/installation mistakes to avoid:

When practicable, do not place silt fence slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. When the flow concentrates, it overtops the barrier and the silt fence slope barrier quickly deteriorates.
Do not place silt-fence posts on the upslope side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, iiails, etc.). The silt fence will rip and fail.
Do not place silt fence slope barriers in areas with shallow soils underlain by rock. If the barrier is not sufficiently anchored, it will wash out.
Silt fence slope barriers must be dug into the ground-silt fence at ground level does not work because water will flow underneath.

Inspection and Maintenance:

Silt fence slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Are there any points along the slope barrier where water is concentrating?
Does water flow under the slope barrier?
Do the silt fences sag excessively?
Has the silt fence torn or become detached from the posts?
Does sediment need to be removed from behind the slope barrier?

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
EROSION CONTROL DETAILS
CITY OF WICHITA, KANSAS
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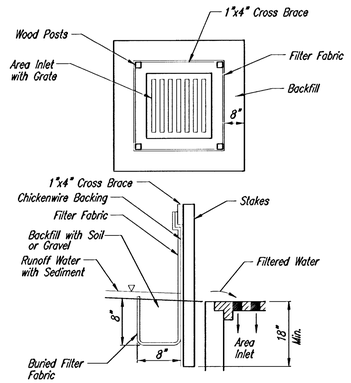


SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The wire or polymeric mesh backing used to help support the silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
The material used to frame the tops of the posts should be 1" by 4" boards.
Silt fence fabric and support backing should be attached to the wooden posts and frame with staples, wire, zip ties, or nails.

Placement:

Place a silt fence drop inlet barrier in a location where it is unlikely to be overtopped.
Water should flow through silt fence, not over it. Silt fence barriers for area inlets often fail when repeatedly overtopped.
When used as a barrierfor area inlets, silt fence fabric and posts must be supported at the top by a wooden frame.
When a silt fence barrier for area inlets is located near an inlet that has steep approach slopes, the storage capacity behind the barrier is drastically reduced. Timely removal of sediment must occur for a barrier to operate properly in this location.

Proper installation method:

Excavate a trench around the perimeter of the area inlet that is at least 8" deep by 8" wide.
Drive posts to a depth of at least 18" around the perimeter of the area inlet.
The distance between posts should be 4' or less. If the distance between two adjacent corner posts is more than 4', add another post(s) between them.
Connect the tops of all the posts with a wooden frame made of 1" by 4" boards. Use nails or screws for fastening.
Attach the wire or polymeric-mesh backing to the outside of the post/frame structure with staples, wire, zip ties, or nails.
Roll out a continuous length of silt fence fabric long enough to wrap around the perimeter of the area inlet. Add more length for overlapping the fabric joint. Place the edge of the fabric in the trench, starting at the outside edge of the trench. Line all three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt fence fabric should remain exposed.
Attach the silt fence to the outside of the post/frame structure with staples, wire, zip ties, or nails. The joint should be overlopped to the next post.

Note: When a silt fence barrier for area inlet is placed in a shallow median ditch, make sure that the top of the barrier is not higher than the paved road. In this configuration, water may spread onto the roadway causing a hazardous condition.

List of common placement/installation mistakes to avoid:

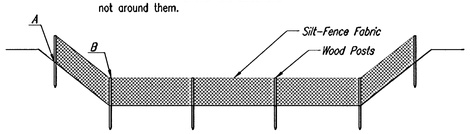
Water should flow through a silt fence barrier for area inlet-not over it. Place a silt fence barrier for area inlet in a location where it is unlikely to be overtopped. Silt fence barrier for area inlets often fail when repeatedly overtopped.
Do not place posts on the outside of the silt fence barrier for area inlet. In this configuration, the force of the water is not resisted by the posts, but only by the staples (wire, zip-ties, nails, etc.). The silt fence will rip and fail.
Do not install silt fence barrier for area inlets without framing the top of the posts.
The corner posts around area inlets are stressed in two directions whereas a normal silt fence is only stressed in one direction. This added stress requires more support.

Inspection and Maintenance:

Silt fence barrier for area inlets should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

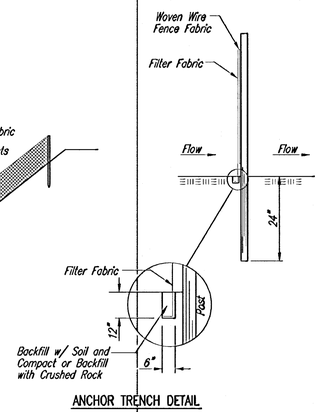
Does water flow under the silt fence?
Does the silt fence sag excessively?
Has the silt fence torn or become detached from the posts?
Does sediment need to be removed from behind the area inlet barrier?

NOTE: Point A must be higher than Point B so that water flows over the bales and not around them.



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement:

Place silt fence in ditches where it is unlikely that it will be overtopped.
Water should flow through a silt fence ditch check, not over it. Silt fence ditch checks often fail when overtopped.
Silt fence ditch checks should be placed perpendicular to the flowline of the ditch.
The silt fence should extend far enough so that the ground level at the ends of the fence is higher than the top of the low point of the fence. This prevents water from flowing around the check.
Checks should not be placed in ditches where high flows are expected. Rock checks should be used instead.
Silt fence should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used.

The following table provides check spacing for a given ditch grade:

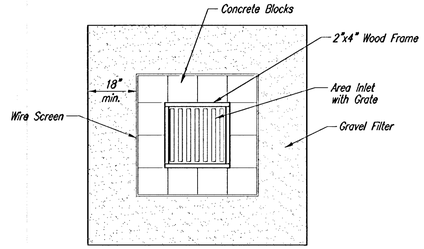
Ditch Check Ditch grade (%)	Spacing Check Spacing (feet)	Ditch Check Ditch grade (%)	Spacing Check Spacing (feet)
0.5	200	4.0	50
1.0	200	5.0	40
2.0	100	6.0	30
3.0	65		

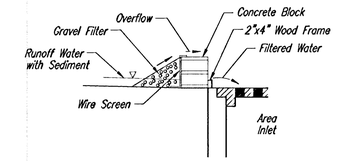
Proper installation method:

Excavate a trench perpendicular to the ditch flowline that is at least 12" deep by 6" wide.
Extend the trench in a straight line along the entire length of the proposed ditch check.
Place the soil on the upstream side of the trench for later use.
Roll out a continuous length of silt fence fabric on the downstream side of the trench.
Place the edge of the fabric in the trench starting at the top upstream edge of the trench. Line two sides of the trench with the fabric as shown on detail. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt fence fabric should remain exposed.
Lay the exposed silt fence on the upstream side of the trench to clear an area for driving in the posts. Just downstream of the trench, drive posts into the ground to a depth of at least 24". Place posts no more than 4' apart.
Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

List of common placement/installation mistakes to avoid:

Water should flow through a silt fence ditch check-not over it. Place silt fence in ditches where it is unlikely that it will be overtopped. Silt fence installations quickly deteriorate when water overtops them.
Do not place silt fence posts on the upstream side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, nails, etc.). The silt fence will rip and fail.
Do not place a silt fence ditch check directly in front of a culvert outlet. It will not stand up to the concentrated flow.
Do not place silt fence ditch checks in ditches that will likely experience high flows. They will not stand up to concentrated flow.
Follow prescribed ditch check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.
Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the fence is higher than the low point on the top of the fence.
Do not place silt fence ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out.





CONCRETE BLOCK FILTER FOR AREA DRAIN
(INLET PROTECTION)

Gravel barriers provide little filtering of large inflow waters. However, when installed correctly and maintained, they can effectively treat low runoff flows.

Placement of gravel filters around area drains must be completed in a manner that will not cause local flooding.

Gravel filters can be used if the immediate and adjacent area to the area drain consists of soil or pavement.

Only gravel filters are to be installed on top of the pavement.

Instructions for Installing:

STEP 1: Place concrete blocks around the grate. The blocks can be stacked one or two high and should be supported by a 2"x4" board.
STEP 2: Wrap 1/2" mesh wire screen around the concrete blocks.
STEP 3: Place 1" to 1-1/2" diameter rock around the blocks and wire screen. Be sure the rock extends down from the top of the concrete block.
STEP 4: To prevent damage to vehicles, signs warning drivers about the structures may be necessary.

An alternative method is use of gravel bags that are supported to prevent collapsing.

Use of rock having diameters smaller than 1" may result in clogging of pores and reduce the amount of water flowing into an inlet.

Maintenance:

All gravel filters installed around area drains should be inspected and repaired after each runoff event. Sediment should be removed when material is within 3" of the top of any block. Periodically, the gravel should be raked to increase infiltration and filtering of runoff waters. Accumulated sediment is to be removed immediately from roads and streets after every runoff event.

Inspection and Maintenance:

Silt fence ditch checks should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow around the ditch check?
Does water flow under the ditch check?
Does the silt fence sag excessively?
Has the silt fence torn or become detached from the posts?
Does sediment need to be removed from behind the ditch check?

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
EROSION CONTROL DETAILS
CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. - CITY ENGINEER

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
3940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone 316/685-4114 ■ FAX 316/685-4444

FINAL

Designed By: J. Ubert / B. Kulla
Drawn By: B. Kulla
Poe Job No.: 1827
Date: March 2005

Sheet 5 of 8

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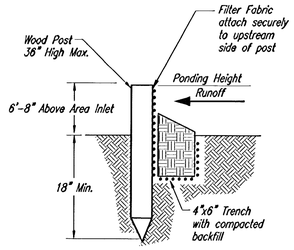
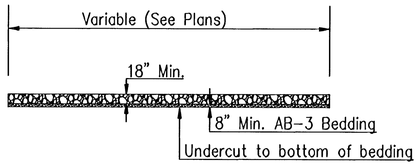


SILT FENCE BARRIERS

SILT FENCE BARRIERS

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 3' long.
Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.



Light Stone Rip Rap shall be used
(Bedding shall be subsidiary to rip rap cost)

RIP RAP DETAIL

(No Scale)

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

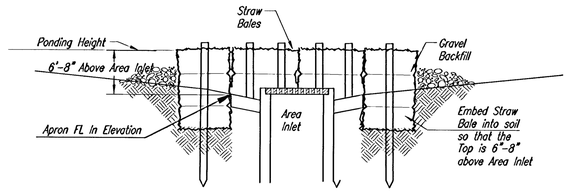
LEGEND

Permanent Seeding Area
(300 lb/acre Fescue Grass)
Total Area = 0.24 Acres

SEDIMENT BARRIER — Sediment Barrier
(Hay Bales to be used around inlet)

NOTE: Contractor shall maintain all existing BMPs on project site during construction. Contractor shall repair or replace any existing BMPs that are damaged (Cost subsidiary to site restoration). If BMP(s) were damaged prior to contractor beginning work on project, notify construction inspector or engineer.

STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)



SECTION A-A

Material Specification:

Bale area inlet barriers should be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
STORM WATER POLLUTION PREVENTION PLAN
CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. - CITY ENGINEER

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
5940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone 316/685-4114 ■ FAX 316/685-4444

FINAL

Designed By: J. Ubert / B. Kulla
Drawn By: B. Kulla
Poe Job No.: 1827
Date: March 2005

Sheet 6 of 8

Z:\1827\base.dwg Thu Apr 07 11:13:19 2005 Bernard Kulla, Poe & Associates, Inc.

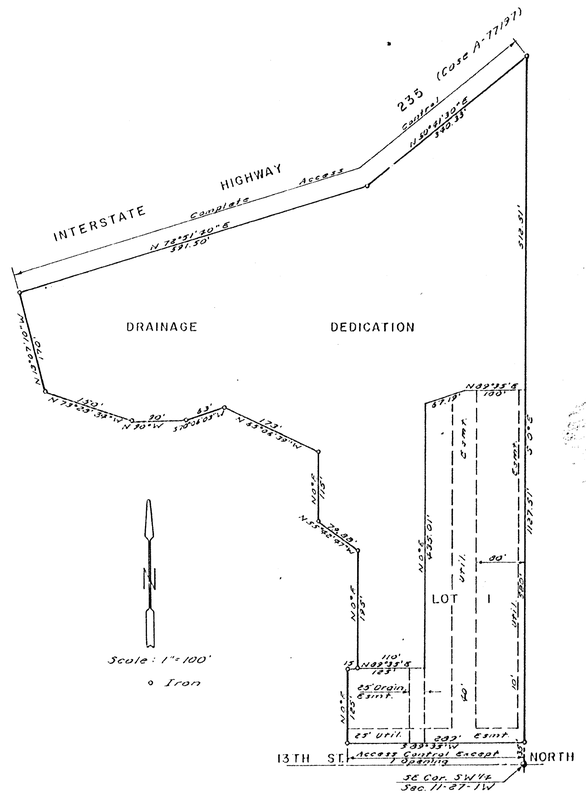
05-9 1-5

05-9 1-5

WESTWOOD VILLAGE 3RD ADDITION

WICHITA, KANSAS

LIBRARY COPY
SEDGWICK COUNTY, KANSAS
REGISTER OF DEEDS
LARRY CONSOLVER



Know all men by these presents, that we, the undersigned, have caused the land described in the surveyors certificate to be platted into a lot and drainage dedication to be known as "WESTWOOD VILLAGE 3RD ADDITION", Wichita, Kansas. The drainage dedication is hereby dedicated for drainage purposes. The easements are hereby granted as indicated for the construction and maintenance of public utilities. All abutters rights of access to 13th St. North are hereby granted to the City of Wichita, Kansas, except, however, that Lot 1 shall have access to 13th St. North at one location over the south line of said Lot 1, said location to be determined by the City Engineer.

Sheffield Place, Inc.

C. Bill Bachman _____ President

Dennis R. Niedens _____ Rosemary Niedens

City of Wichita, Kansas

K.C. Brown _____ Mayor

Donald C. Oisick _____ City Clerk

State of Kansas } S.S.
Sedgwick County }

The foregoing instrument was acknowledged before me this 17th day of December, 1991, by Sheffield Place, Inc., by C. Bill Bachman, President.

Notary Public
My Commission Expires August 5, 1994

State of Kansas } S.S.
Sedgwick County }

The foregoing instrument was acknowledged before me this 17th day of July, 1992, by Dennis R. Niedens and Rosemary Niedens, his wife.

Notary Public
My Commission expires July 9, 1995

State of Kansas } S.S.
Sedgwick County }

The foregoing instrument was acknowledged before me this 6th day of April, 1992, by the City of Wichita, Kansas, by K.C. Brown, Mayor, and Donald C. Oisick, City Clerk.

Notary Public
My Commission expires 3-20-94

DEBRA D. FRERKING
STATE OF KANSAS
SEDGWICK COUNTY
MY APPT. EXP. 3-20-94

We, the State Bank of Colwich, Kansas, holder of a mortgage on part of the above described property, do hereby consent to this plat of "WESTWOOD VILLAGE 3RD ADDITION."

State Bank of Colwich, Kansas.

John F. Siementag _____ President

State of Kansas } S.S.
Sedgwick County }

We, Baughman Company, P.A., Surveyors in aforesaid county and state, do hereby certify that we have surveyed and platted "WESTWOOD VILLAGE 3RD ADDITION", Wichita, Kansas; and that the accompanying plat is a true and correct exhibit of the property surveyed, described as a replat of Lots 1 thru 15, Block 2; Lot 14, Block 1; the Reserve, and Anna Circle and Anna Court as platted in Westwood Village Addition, Wichita, Kansas, located in the SW¼ of Section 11, T27S, R1W. The above Circle and Court along with platted building setbacks, utility and drainage easements are are being vacated by virtue of KSA 1970 Supp. 12-512(b)

Date Nov. 16, 1991

Baughman Company, P.A.

John E. Lundblade _____ Surveyor

JOHN E. LUNDBLADE
LS-1010
LAND SURVEYOR

20.00

This plat of "WESTWOOD VILLAGE 3RD ADDITION", Wichita, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas. Dated this 19th day of November, 1991.

Wichita-Sedgwick County Metropolitan Area Planning Commission

James A. Clark, II _____ Chairman

Robert A. Larkin _____ Secretary

This plat approved and all dedications shown hereon accepted by the Board of City Commissioners, Wichita, Kansas, this 6th day of April, 1992.

K.C. Brown _____ Mayor

Donald C. Oisick _____ City Clerk

This plat approved and all dedications shown hereon accepted by the Board of County Commissioners, Sedgwick County, Kansas, this 17th day of April, 1992.

Tom Stolz _____ Chairman

Tom Stolz _____ Commissioner

Donald D. Brood _____ Commissioner

Dorothy K. White _____ County Clerk

By Michael T. Sawyer
MICHAEL T. SAWYER, Deputy

Entered on transfer record this 17th day of April, 1992.

Dorothy K. White _____ County Clerk

By Michael T. Sawyer
MICHAEL T. SAWYER, Deputy

#519515

State of Kansas } S.S.
Sedgwick County }

This is to certify that this plat has been filed for record in the Office of the Register of Deeds this 19TH day of APRIL, 1992, at 11:30 o'clock, A.M., and is duly recorded.

Bette F. McCart _____ Register of Deeds
BETTE F. McCART

Pat Kettler _____ Deputy
PAT KETTLER

State of Kansas } S.S.
Sedgwick County }

The foregoing instrument was acknowledged before me this 14th day of February, 1992, by the State Bank of Colwich, Kansas, by John F. Siementag, President.

Notary Public
My Commission Expires August 30, 1992

JOHN F. SIEMENTAG
STATE OF KANSAS
SEDGWICK COUNTY
MY APPT. EXP.

Restrictive Cov. F 523 P. 505

S-1 6-30

S-1 6-30

No.	Date	By	Approved	Revision

PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS
WESTWOOD VILLAGE 3RD PLAT
CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. - CITY ENGINEER

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
5940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone: 316/685-4114 ■ FAX: 316/685-4444

FINAL

Designed By: J. Ubert / B. Kulla
Drawn By: B. Kulla
Poe Job No.: 1827
Date: March 2005

Sheet 7 of 8

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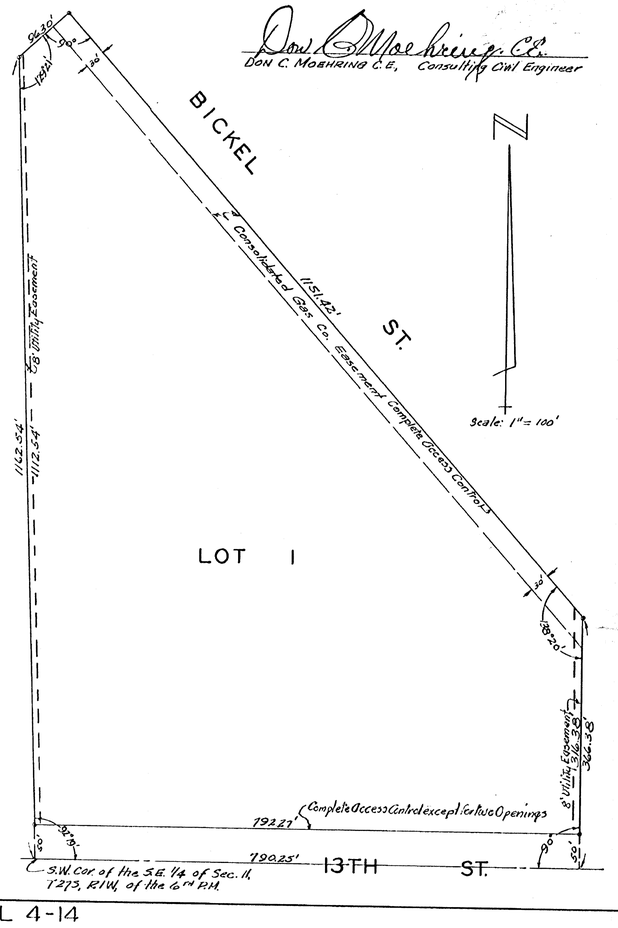
SYNOD ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas }
County of Sedgwick } ss

I, Don C. Moehring, C.E., a Civil Engineer in and for said State and County, do hereby certify that I have surveyed and platted "SYNOD ADDITION" to Wichita, Sedgwick County into a lot and Streets, the same being accurately set forth on the accompanying plat and described as; Beginning at the Southwest corner of the Southeast 1/4 of Section 11, Township 27 South, Range 1 West of the 6th P.M.; thence East along the South Line of said Southeast 1/4 a distance of 790.25 feet; thence North at an included angle of 90°00', a distance of 366.38 feet to a point in the Southwesterly line of Bickel Street; thence Northwesterly along the Southwesterly line of Bickel Street a distance of 1151.42 feet; thence Southwesterly a distance of 96.30 feet to a point in the West Line of said Southeast 1/4, being 1162.54 feet North of the Southwest corner of said Southeast 1/4; thence South along the West Line of said Southeast 1/4 a distance of 1162.54 feet to the point of beginning.

Don C. Moehring C.E.
DON C. MOEHRING C.E., Consulting Civil Engineer



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Know all men by these presents, that the undersigned property owner of the land above set forth in the Civil Engineers certificate has caused the same to be platted into a Lot and Streets, the same to be known as Synod Addition to Wichita, Sedgwick County, Kansas. The Streets are hereby dedicated to and for the use of the public, and Easements for the construction and maintenance of public utilities as indicated hereon are hereby granted. All abutters rights of access to or from Bickel Street and 13th Street over and across the South and Northeast lines of Lot 1, are hereby granted to the City of Wichita, provided however that Lot 1 shall have access to 13th Street at two locations as may be established by the City of Wichita.

Ruth Spooner Stone

State of Kansas }
County of Sedgwick } ss

Be it remembered, that on this 30th day of December 1958 before me, a Notary Public in and for said State and County, came Ruth Spooner Stone, a single woman to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledge the same as her voluntary act and deed.

My Commission expires May 21, 1959

Vern L. Forney Notary Public.

This plat of "SYNOD ADDITION" to Wichita, Sedgwick County, Kansas has been submitted to and considered by the Wichita-Sedgwick County Metropolitan Area Planning Commission and is hereby transmitted to the Board of Commissioners of the City of Wichita, Kansas, with the recommendation that such plat be approved as proposed. Dated this 8th day of December 1966

The Wichita-Sedgwick County Metropolitan Area Planning Commission

H W Kratzer Chairman

Attest; C. Bickley Foster Secretary

Approved by the Board of City Commissioners this 22nd day of Feb. 1967

John A. Stevens Mayor

Ralph C. Eberly City Clerk

Approved by the Board of County Commissioners this 14th day of Mar. 1967

Jay Scott Chairman

Elmer Peters Commissioner

Earl E. Bush Commissioner

Marie Warden County Clerk

State of Kansas }
County of Sedgwick } ss

This is to certify that this instrument was filed for record in the Register of Deeds Office this 30th day of March 1967, at 1 O'clock P.M. and is duly recorded

Rufus E. Deering Register of Deeds

Pearl Gilbert Deputy

5752

Entered on transfer record this 30 day of March 1967

Marie Warden County Clerk

This digital plat record accurately reproduces in all details the original plat filed with the Sedgwick County Register of Deeds. Digitized under the supervision of Register of Deeds Bill Meek by Sedgwick County Geographic Information Systems.

Bill Meek, Register of Deeds
Digitized rendition of original signature

18-04-03-03

FINAL	POE & ASSOCIATES, INC. CONSULTING ENGINEERS 5940 E. Central, Suite 200 ■ Wichita, KS 67208-4242 Phone 316/685-4114 ■ FAX 316/685-4444	PRESBYTERIAN MANOR DRAINAGE IMPROVEMENTS SYNOD ADDITION PLAT CITY OF WICHITA, KANSAS JAMES ARMOUR, P.E. - CITY ENGINEER	No.	Date	By	Approved	Revision
Designed By: J. Ubert / B. Kulla			△				
Drawn By: B. Kulla			△				
Poe Job No.: 1827			△				
Date: March 2005			△				

Sheet 8 of 8