# GENERAL NOTES:

1. The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.

   a. Maintain a minimum of 10–foot horizontal separation between all water lines (mains, services, and fire hydrants) and all sanitary sewer lines (mains, services, and manholes). All separation distances are to be measured from edge–to–edge, at the closest point.

   b. Maintain a minimum of 2–foot vertical separation between all water lines (mains and services) and all gravity sanitary sewer lines (mains, services, and manholes) at crossings. All separation distances are to be measured from edge–to–edge, at the closest point.

   c. Maintain a minimum of 2–foot vertical separation between all water lines (mains and services) and all pressurized sanitary sewer lines (force mains and services) at crossings. Waterlines must always be placed above pressurized sanitary sewer lines where they cross. All separation distances are to be measured from edge–to–edge, at the closest point.

2. Contractor will be required to provide notice to utility companies a minimum of seventy–two (72) hours prior to any excavation, as follows:

   Kansas One–Call 687–2470

   The Contractor must notify the following in case of an emergency:

   | | |
   |---|---|
   | AT&T | 1–800–246–8464 |
   | Black Hills Energy | 1–800–694–8989 |
   | City of Wichita Water & Sewer | 1–316–219–8921 |
   | City of Wichita Stormwater | 1–316–268–4090 |
   | City of Wichita Traffic | 1–316–268–4034 |
   | Cox Communications | 1–888–249–3530 |
   | Kansas Gas Service | 1–888–482–4950 |
   | Evergy | 1–800–544–4857 |

3. Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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.

4. 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, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will 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 will require additional archaeological investigations unless buried in a previously approved borrow location.

5. Trees and shrubs in public right–of–way which are in direct conflict with proposed new construction shall be removed by the Contractor with the City 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 give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.

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

8. The Engineering Division shall field locate water valve one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match field grades by the contractor.

9. The Contractor shall notify the consultant engineer and Dawnita Reinhardt at 316–650–0740 with the City of Wichita with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.

10. If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibility.

11. All elevations shown are NAVD88.

12. All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions per City specifications.

13. Any sidewalk, drive approach, curb, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316–268–4501 or 316–268–4480.

14. All applicable fees (tap, equity, in lieu of & main benefit) must be paid before any work on this project can commence. Quotes can be obtained on fees by calling 316–268–4555.

15. Opening and closing of water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the contractor must be reopened as new construction permits. The project inspector must ascertain that any valve closed by the Contractor is reopened. The contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.

16. The Contractor shall lay a Tracer Wire and Set Test Stations along all water pipe installed in accordance with City Specifications and Tracer Wire Detail on detail sheet WL–101, cost is subsidiary to pipe installation.

17. The contractor shall provide materials for temporary blowoff of waterlines. Connections to the existing waterline(s) shall be made with clean, swabbed pipe and flushed upon completion of tie–ins.

18. Requests for short term water interruptions shall be made to the City Water Distribution Division and will be subject to their approval. The Contractor shall give written notice to any property owner, business, and/or tenants that will have water service interrupted at least 5 days in advance. Such notifications should indicate the time and date that the water will be turned off and when the service will be restored. No business, property owner, and/or tenants shall be without water service for more than 8 hours. Proposed tie in locations which will affect water service to property owners shall be performed during non–peak hours.

19. The Contractor must schedule the connections to the existing main with the City such that there is a minimum disruption of service. Connections shall be made during periods of low water usage. The Contractor shall submit his proposed schedule for completing work for City approval at least 10 days prior to beginning construction.

20. Any existing joint exposed during excavation shall be replaced if within four feet of proposed joint.

21. All wet taps shall be installed by the City of Wichita. The Contractor will reimburse the City for tapping fees prior to tap being made. Unless noted on plans.

22. The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractor's expense.

23. Wichita Fire Department inspections may be scheduled by calling Dawnita Reinhardt at 316–650–0740.

24. All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on–site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on–site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMPs".

25. All excess excavation shall remain on–site and shall be spread or stockpiled at a location to be determined by developer.

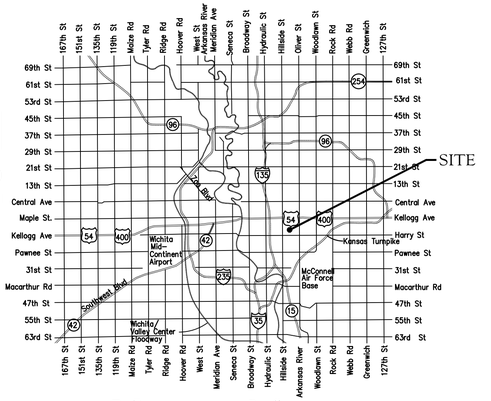
26. All areas disturbed during construction are to be seeded as follows:

    Seed –– Rye grass; 5 lbs./1000 Sq. Ft.

    All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".

27. The Contractor shall not begin work on the project until the Project Inspector is assigned and on site. Any work completed without inspection will be required to be uncovered for inspection at the Contractor's expense.

# WATER DISTRIBUTION SYSTEM
to serve
# VIA CHRISTI ST. JOSEPH EMERGENCY DEPT. Ph. 2
3600 E. HARRY
## CITY OF WICHITA, KANSAS
Paul Gunzelman, P.E. City Engineer
2024-030297PPW
54030980




Vicinity Map

## Benchmarks

*BM #1: "□" Chiseled with "+" on Top of Curb, south end of SW return of Grand Ave. & Clifton Ave. Elevation=1330.59 (NAVD88)*

*BM #2: "□" Chiseled with "+" on Top of Curb, ~280' south of south end of SW return of Grand Ave. & Clifton Ave. Elevation=1324.84 (NAVD88)*

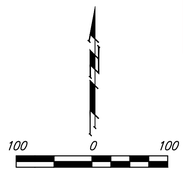
**AS-BUILTS**

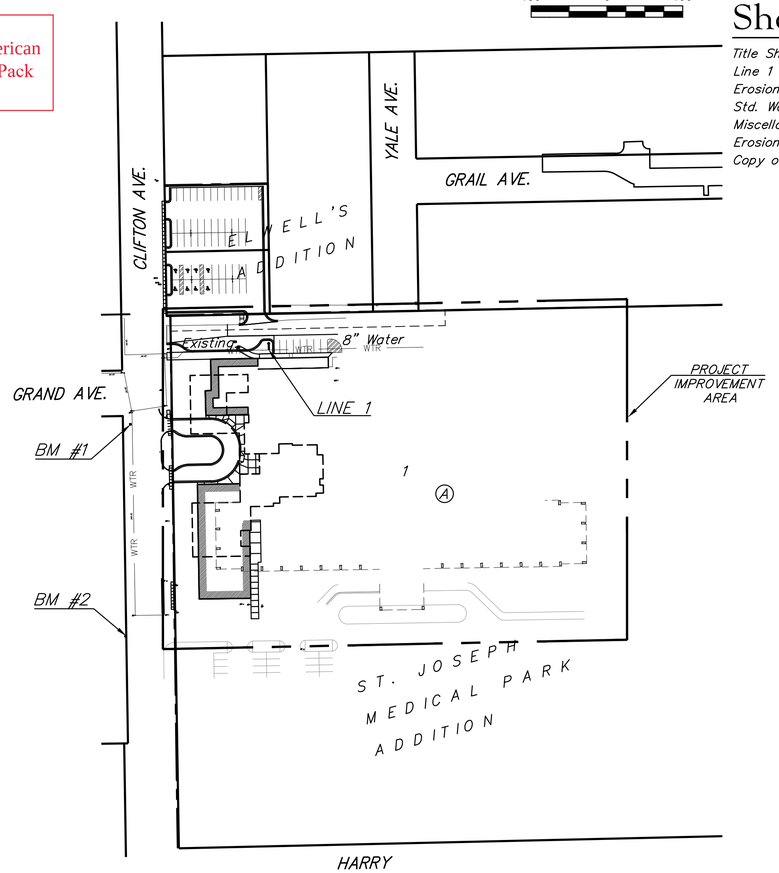
| Contractor: | Project Inspector: |
|---|---|
| Apex | Pablo Oden |
| Date: 2/11/2026 | KEMILLER ENGINEERING PA<br>117 E. Lewis, Wichita, KS 67202 (316)264-0242 |

Reused existing meter & ERT
Vault Meter Reading: 220953672
Vault Meter Serial#: 71915416
ERT Serial#: 00003141

105092-301

Materials:
- 6" DICL American
- SIP MJ Acc. Pack
- Mueller FH




## Sheet Index


| | |
|---|---|
| Title Sheet | 1 |
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| Erosion Control/Grading Plan | 3 |
| Std. Water Assembly Detail | 4 |
| Miscellaneous Water Details | 5 |
| Erosion Control BMP Details | 6–10 |
| Copy of Plat | 11 |


APPROVED AS NOTED
BY WICHITA PUBLIC WORKS
ENGINEERING DIVISION
& BY WICHITA FIRE DEPARTMENT

Engineering approved by Shawn Mellies on 12.17.24
Utilities approved by Greg Lolley on 12.17.24
Fire Dept. approved by Jose Ocadiz on 12.17.24

NOTE TO CONTRACTORS

*Public Property:*

*Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said Inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public right–of–way by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City of Wichita Specifications and Standards and Special Provisions (on file and available in the City Engineer's Office) or on the City's Website.*

*Private Property:*

*Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed Engineering Firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.*

*An approved copy of these plans signed by City staff are required on–site.*

TREVOR JAMES WOTEN LICENSED 21190 12-18-24 KANSAS PROFESSIONAL ENGINEER

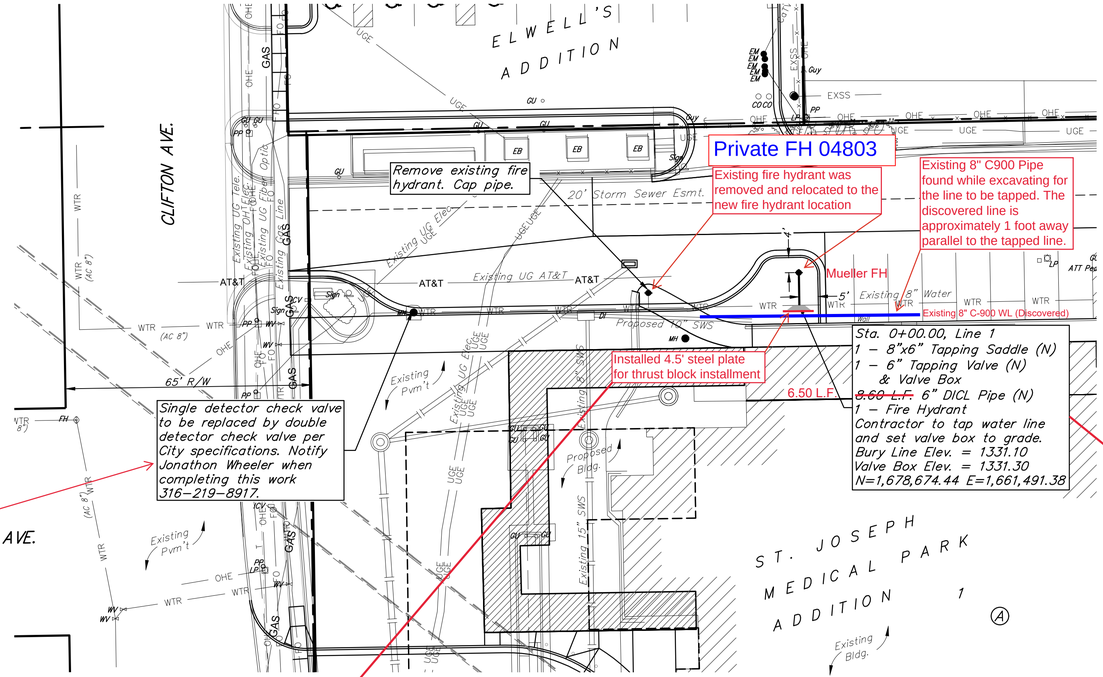
January 14, 2025

BAUGHMAN COMPANY
315 Ellis St. Wichita, KS 67211 316-262-7271
BaughmanCo.com

E:\Projects\St. Joseph Hospital ED expansion\Engineering\Phase 2\PPW\PPW.dwg

BENCHMARKS:
BM #1: "□" Chiseled with "+" on Top of Curb, south end of SW return of Grand Ave. & Clifton Ave.
Elevation=1330.59 (NAVD88)

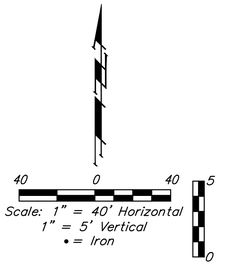
BM #2: "□" Chiseled with "+" on Top of Curb, ~280' south of south end of SW return of Grand Ave. & Clifton Ave.
Elevation=1324.84 (NAVD88)




Contractor to verify whether the system is looped. If looped, bring south detector check valve up to City specs.

The original vault was large enough to accommodate the double detector check valve replacement. The existing vault could not be removed and replaced because nearby footing and utilities were in the way. Therefore, Beran Concrete poured a new concrete lid and reused the existing frame and lid components from the old concrete lid. The existing bypass meter and ERT were also reused. While also, chain and padlock were added to secure the new double detector assembly. Installment was confirmed by the GC (McCownGordon).

From RP:
52.00' North & 166.00' East Tapping Sleeve
53.00' North & 166.00' East FH/Tap Valve
60.50' North & 166.00' East Fire Hydrant

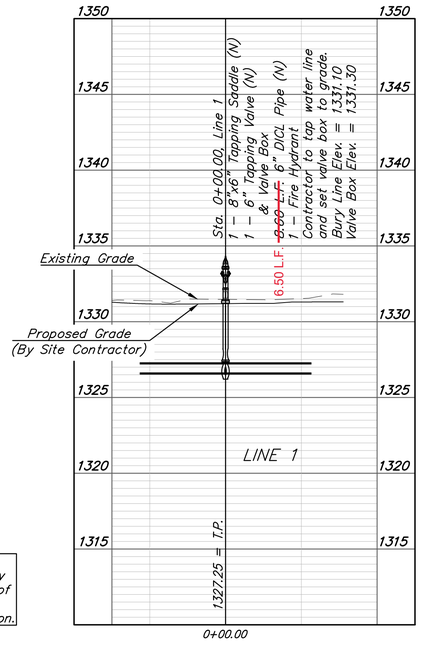



Contractor to verify depth and location of existing utilities. Contractor to relocate any existing utilities as necessary for construction.

Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
Heide Bryan, Evergy, (316) 261-6354
Shannon Brinkmeyer, AT&T (316) 268-2931
Travis Taylor, Cox Comm., Travis.taylor@cox.com



Reference Point (RP):
Centerline of Grand St. & S Clifton Ave.




DEPTH UNKNOWN
Contractor to Verify Depth & Location of Existing Water Line Prior to Construction.


BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com


VIA CHRISTI ST. JOSEPH EMERGENCY DEPT. Ph. 2

**LINE 1**

WATER DISTRIBUTION SYSTEM

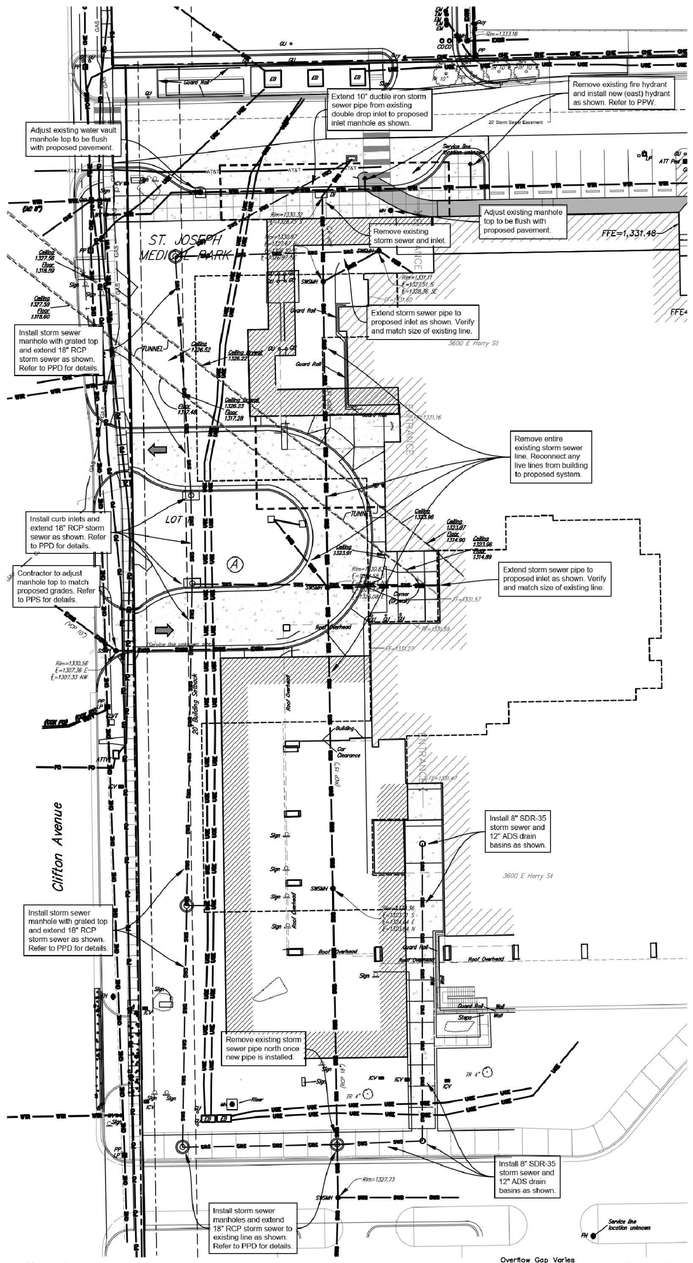
PROJECT NUMBER:
23-09-E613

DESIGN: TJW DRAWN: TMS

DATE: January 14, 2025

SHEET 2 OF 11

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## SITE UTILITY PLAN

SCALE 20 0 20

## UTILITY NOTES

1. **Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. Location information has been obtained from the various utility companies and is either from company record drawings or company provided field locations. The Contractor will be required to work around existing utilities which do not conflict with proposed construction.**
2. **Traffic affected by the construction on this project shall be handled in accordance with the latest edition of the Local Manual on Uniform Traffic Control Devices.**
3. **The Contractor shall verify all utility locations prior to construction of this project.**
4. **Refer to Landscape Plan for final treatment of disturbed areas.**
5. **Proposed underground storm sewer mains, water mains/fire hydrants, or sanitary sewer mains, if any, shall be the contractor's responsibility. This portion of the project shall be designed and constructed under a separate plan set or private project, and undergo Local City review and approval. The installation of any mains is required to be done by a bonded contractor, inspected and certified. The Contractor shall construct the mains only from Local City approved plans which will be provided to the General Contractor or can be provided by Baughman Company, P.A.**
6. **The Contractor shall receive written approval from adjacent landowners prior to proceeding with any construction work on landowner's property.**
7. **Gas service tie-ins to new meters shall be per service provider standards. Tie-ins are to be above ground at the meter.**
8. **Utility service connections are to be installed per applicable Local City Codes.**
9. **Contractor shall be responsible for coordination and cost of all utility service connections, permits, relocations, abandonments, and removals.**
10. **Water taps to be made by Local City Water Department. Contractor to reimburse City for tapping costs.**

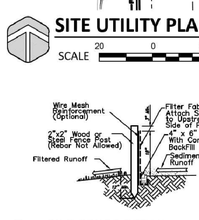
## LEGEND

Existing Utilities

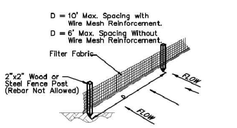
- Electric Underground
- Electric Overhead
- Water Line
- Gas Line
- Petroleum Pipeline
- Storm Water Sewer Pipe
- Sanitary Sewer Line
- Telecommunication (AT&T)
- Telecommunication (Cox)

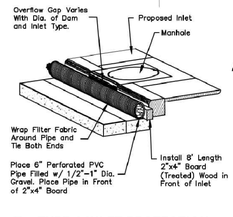
Proposed Utilities

- Electric Underground
- Water Line
- Sanitary Sewer Line
- Gas Service Line
- Storm Sewer Roof Drain
- Fire Sprinkler Line
- Storm Water Sewer
- Telecom/Data Conduit

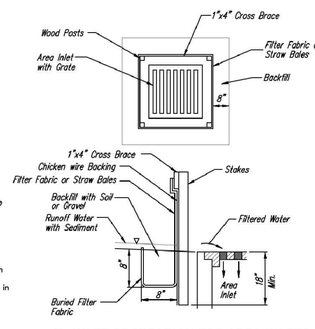



1 **SILT FENCE DETAIL**
NOT TO SCALE

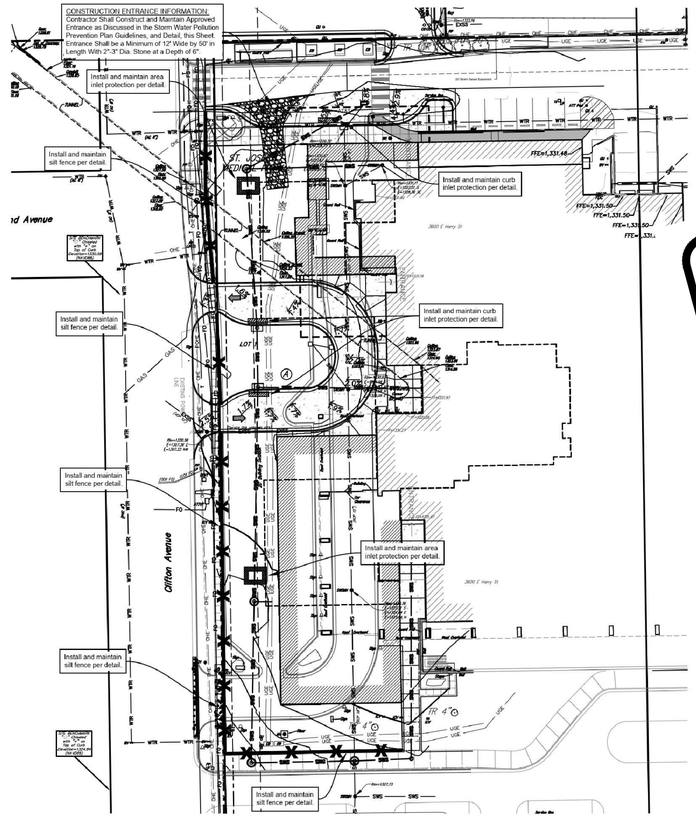



2 **TYPE 1 INLET PROTECTION**
NOT TO SCALE



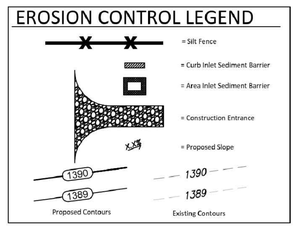

3 **INLET PROTECTION FOR AREA INLETS**
(INLET PROTECTION: SILT FENCE OR STRAW BALES)

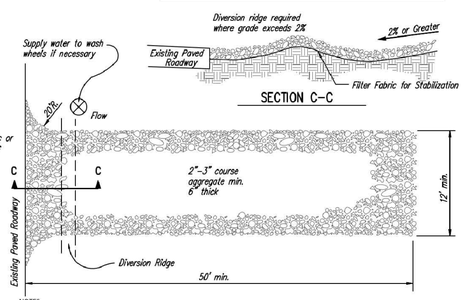



## EROSION CONTROL PLAN

SCALE 30 0 30

## EROSION CONTROL LEGEND




NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

4 **STABILIZED CONSTRUCTION ENTRANCE**
NOT TO SCALE

## EROSION CONTROL NOTES

1. **No land clearing or grading shall begin until all applicable erosion control measures have been installed. This project is subject to this SWPP Plan, if applicable. The Contractor shall comply with any unusual requirements as necessary for the site to be in compliance during construction, per this plan and per City and State specifications (See #11).**
2. **All exposed areas shall be seeded as specified within 14 days of final grading. Seed is to include straw mulch, crimped in place per industry standards.**
3. **Should construction stop for longer than 14 days, the site shall be seeded as specified.**
4. **Maintain erosion control measures after each rain and at least once a week.**
5. **This plan shall not be considered all inclusive as the contractor shall take all necessary precautions to prevent soil sediment from leaving the site.**
6. **Contractor shall comply with all state and local ordinances that apply.**
7. **Additional erosion and sediment control measures will be installed if deemed necessary by on site inspection.**
8. **Land disturbing activities shall not commence until approval to do so has been received by governing authorities.**
9. **If installation of storm drainage system should be interrupted by weather or nightfall, the pipe ends shall be covered with filter fabric.**
10. **See Landscape Plan for ground treatments in all disturbed areas beyond impervious surfaces.**
11. **This Erosion Control Plan should be in job trailer and/or on site at all times. The Contractor is responsible for any needed changes, updates or maintenance to BMP's on site. This plan may change and updates need to be recorded and documented on the plan. This plan is a flexible plan, due to changing site conditions and weather. Please inform Landscape Architect and/or Engineer of changes to plan.**
12. **ANY substitutions for the sediment control devices shown, must be approved by the Landscape Architect and/or Engineer prior to any uses on site.**
13. **If site disturbance is over 1 acre, an NPDES Permit Application has been submitted for this property and a copy of this application must be kept at the job site for the duration of the construction process.**

FOR REFERENCE ONLY
NOT TO SCALE

DATE:
SEP 23, 2024 CONSTRUCTION SET

Alloy ARCHITECTURE
alloyarchitecture.com
165 S. ROCK ISLAND, SUITE 200
WICHITA, KS 67202
p: 316.634.1111
f: 316.634.1016

TREVOR JAMES WOOTEN LICENSED PROFESSIONAL ENGINEER 21190 4.23.24 KANSAS

PROJECT NUMBER
23139

The drawing and all information herein is the exclusive property of Alloy Architecture and is not to be copied or used in any way without the express written consent of Alloy Architecture. All drawings, specifications, ideas, designs, and arrangements appearing herein constitute the original and unpublished Work of the Architect.

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Via Christi St. Joseph
Emergency Department Expansion
3600 E. Harry
Wichita, Kansas 67218

SCENSION HEALTH

TREVOR JAMES WOOTEN LICENSED PROFESSIONAL ENGINEER 21190 12-18-24 KANSAS

BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

VIA CHRISTI ST. JOSEPH EMERGENCY DEPT. Ph. 2

# EROSION CONTROL PLAN

WATER DISTRIBUTION SYSTEM

PROJECT NUMBER:
23-09-E613

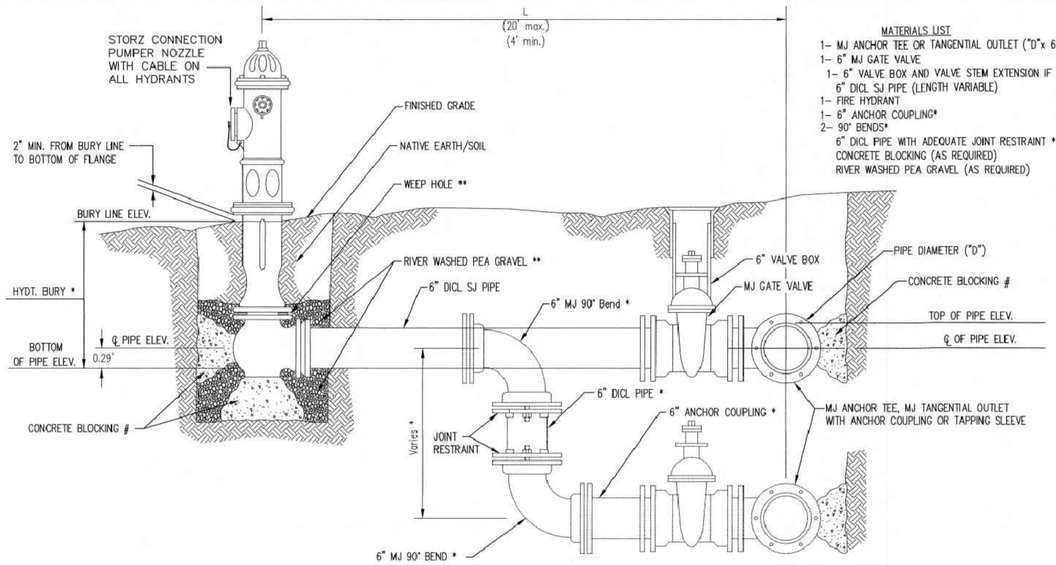
DESIGN: DRAWN:
DATE: January 14, 2025

SHEET 3 OF 11

SHEET
C2.0
OF

BAUGHMAN
315 S. Ellis, Wichita, KS 67211 (316) 262-7271
BaughmanCo.com

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MATERIALS LIST
1– MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D"x 6")
1– 6" MJ GATE VALVE
1– 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
6" DICL SJ PIPE (LENGTH VARIABLE)
1– FIRE HYDRANT
1– 6" ANCHOR COUPLING*
2– 90° BENDS*
6" DICL PIPE WITH ADEQUATE JOINT RESTRAINT *
CONCRETE BLOCKING (AS REQUIRED)
RIVER WASHED PEA GRAVEL (AS REQUIRED)

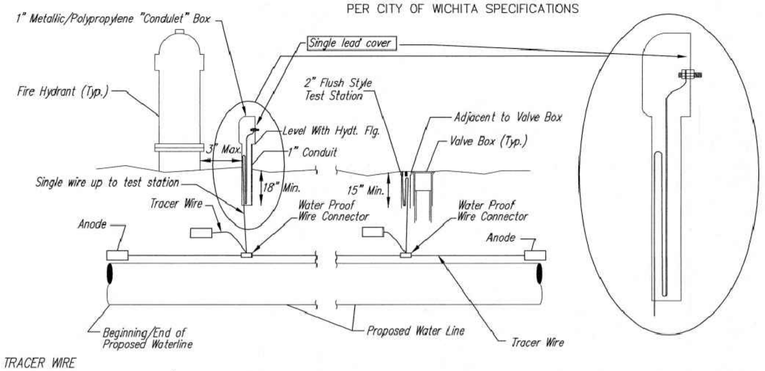
* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2–MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DICL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, OR SIMILAR RESTRAINT BETWEEN 90° BENDS TO SECURE ALL FITTINGS DURING TESTING AND OPERATION. THE CONTRACTOR SHALL PROVIDE A VALVE STEM EXTENSION PER DETAIL THIS SHEET.

** CAUTION: WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.

# CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

## FIRE HYDRANT ASSEMBLY

PER CITY OF WICHITA SPECIFICATIONS




*TRACER WIRE*

*Conductive type pipe locator/tracer wire shall be install to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. A waterproof connector shall be used at splice locations. A complete list of approved tracer wire and waterproof connectors can be found on the City of Wichita's website at www.wichita.gov.*

*WIRE*

*The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.*

*TEST STATIONS*

*The test station for fire hydrant application shall be a 1" "conduiet" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # T2PH7B1LP Handley Industries or CD14*TP SnakePit as manufactured by Copperhead Industries or approved equal. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be install to allow 12" of wire within the test station. The location of all test stations shall be recorded, and shown in the as–built drawings. Flush style test stations shall not be installed in pavement or sidewalk unless approved by the Engineer. Contractor shall extend tracer wire & move flush mount test station to nearest location out of pavement or sidewalk.*

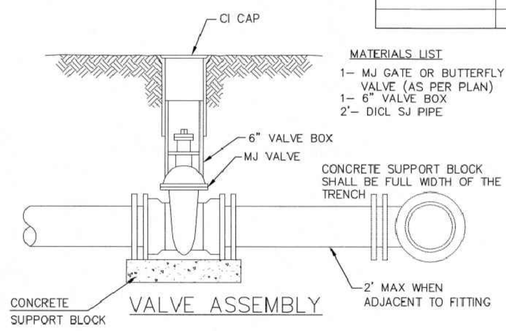
*ANODES*

*The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.*

## TRACER WIRE DETAIL

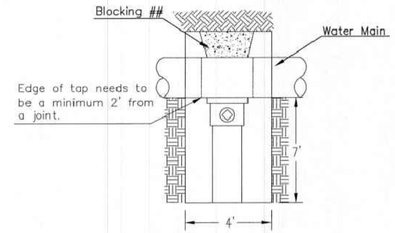
COST IS SUBSIDIARY TO PIPE INSTALLATION

| FIRE HYDRANTS REQUIRED | | | | |
|---|---|---|---|---|
| STATION | BURY LINE ELEVATION | TOP OF PIPE ELEVATION | FIRE HYDRANT BURY REQUIRED* | VALVE STEM EXT. REQUIRED (ft)* |
| 0+00.00 | 1331.10 | 1327.25 | 4.5' | - |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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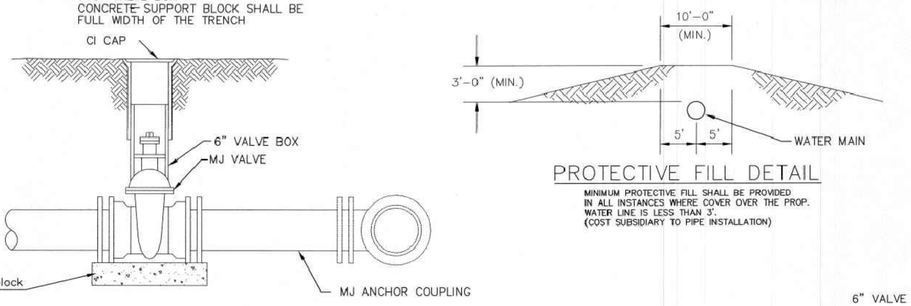

MATERIALS LIST
1– MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1– 6" VALVE BOX
2'– DICL SJ PIPE

## VALVE ASSEMBLY




## CITY TAP

## When the City of Wichita makes tap, blocking is to be done by Contractor



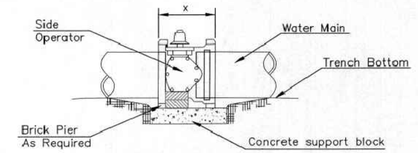

MATERIALS LIST
1–MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1–MJ ANCHOR COUPLING (12" OR SMALLER)
1–6" VALVE BOX
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

## ANCHORED VALVE ASSEMBLY




## PROTECTIVE FILL DETAIL

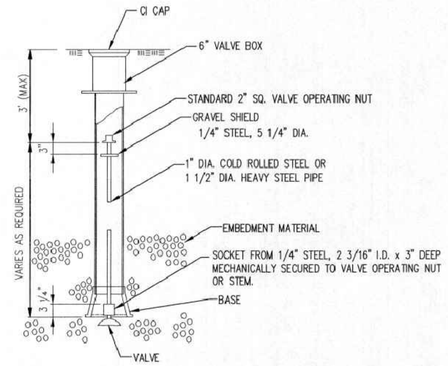
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)




NOTES

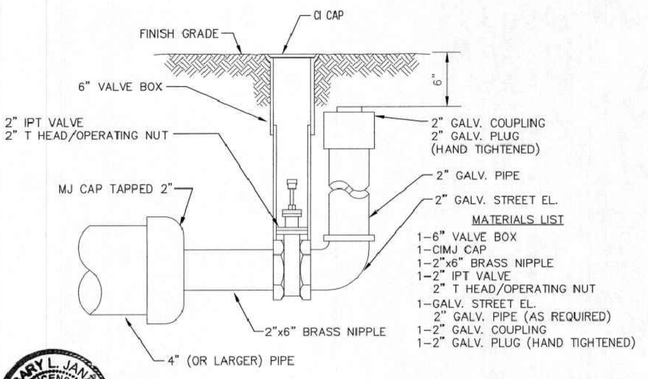
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

## CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



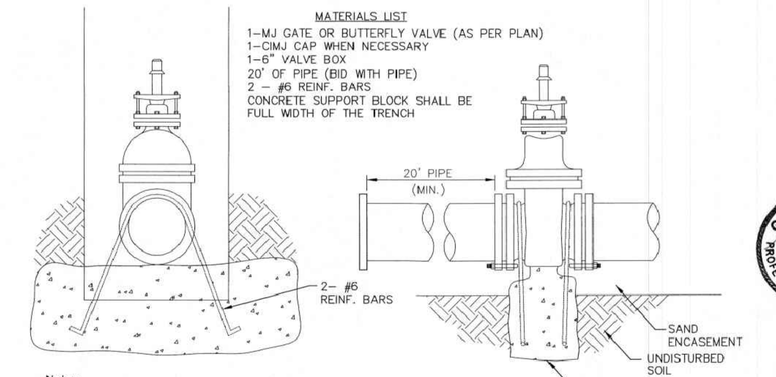

## VALVE STEM EXTENSION DETAIL

NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.




MATERIALS LIST
1–6" VALVE BOX
1–CIMJ CAP
1–2"x6" BRASS NIPPLE
1–2" IPT VALVE
2" T HEAD/OPERATING NUT
1–GALV. STREET EL.
2" GALV. PIPE (AS REQUIRED)
1–2" GALV. COUPLING
1–2" GALV. PLUG (HAND TIGHTENED)

## 2" BLOWOFF ASSEMBLY




MATERIALS LIST
1–MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1–CIMJ CAP WHEN NECESSARY
1–6" VALVE BOX
20' OF PIPE (BID WITH PIPE)
2 – #6 REINF. BARS
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

Notes:
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

| THRUST AT VALVES | |
|---|---|
| VALVE | THRUST AT 150 #/in² |
| 4" | 1809 lbs. |
| 6" | 4245 lbs. |
| 8" | 7540 lbs. |
| 12" | 16965 lbs. |

## ANCHORED VALVE ASSEMBLY, SPECIAL

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
10/27/16

REVISED: OCTOBER 2016

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

# STANDARD WATER ASSEMBLY DETAIL

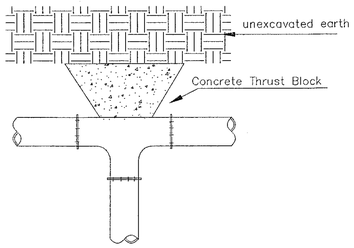
CITY ENGINEER
GARY JANZEN, P.E.

| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
| | | |

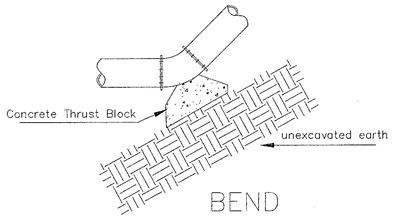
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CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

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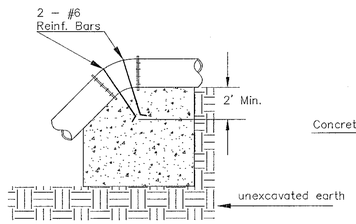
WI -101



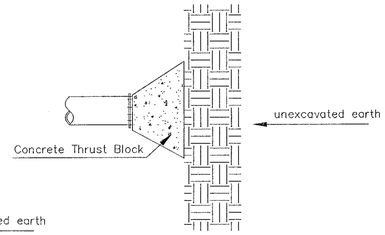

TEE




BEND



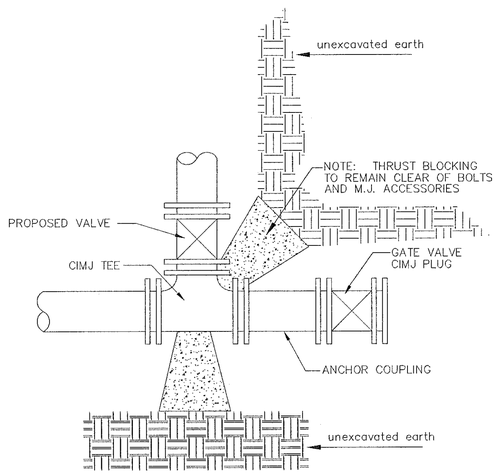

VERTICAL BEND



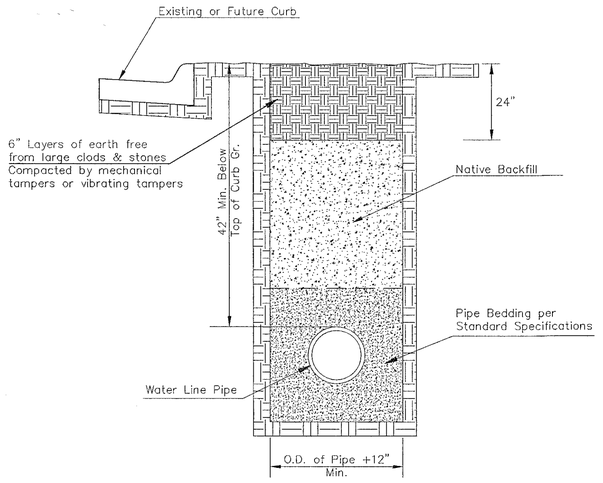

PLUG

| PIPE SIZE | THRUST AT FITTINGS IN TONS-AT 150#/IN$^2$P | | | | | |
|---|---|---|---|---|---|---|
| | PLUG | 90° | 45° | 22 1/2° | 11 1/4° | TEE |
| 6" | 2.8 | 3.95 | 2.15 | 1.09 | .55 | 2.8 |
| 8" | 4.9 | 6.95 | 3.75 | 1.90 | .96 | 4.9 |
| 12" | 11.4 | 16.1 | 8.75 | 4.45 | 2.25 | 11.4 |
| 16" | 20.15 | 28.5 | 15.4 | 7.85 | 3.95 | 20.15 |
| 20" | 31.15 | 44.0 | 23.85 | 12.15 | 6.10 | 31.15 |
| 24" | 44.55 | 63.0 | 34.1 | 17.4 | 8.75 | 44.55 |

TYPICAL THRUST BLOCKS

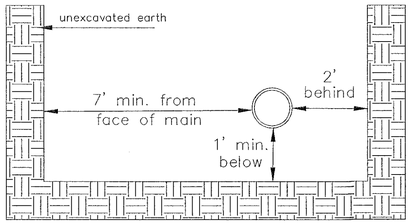



KEY BLOCK DETAIL



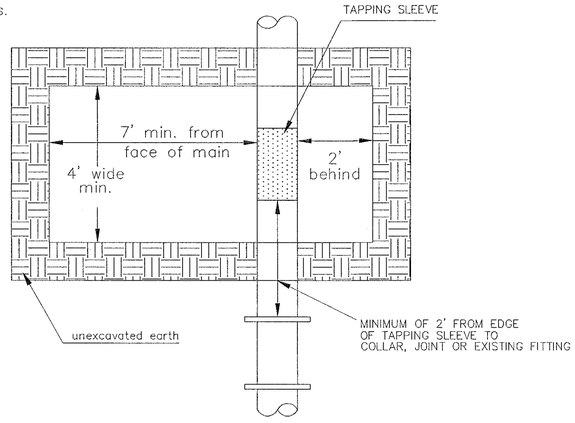

TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

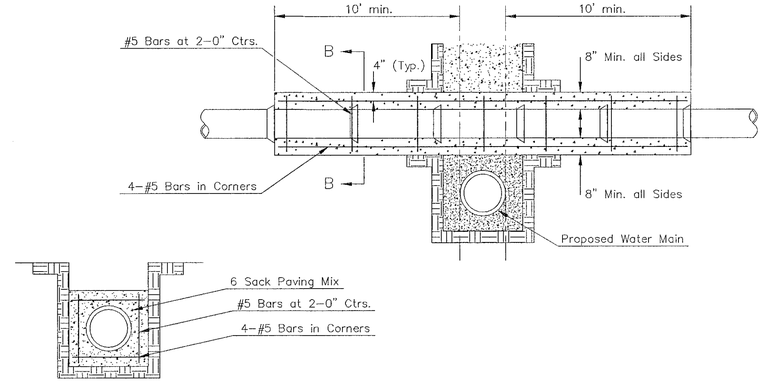



Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

TOP VIEW



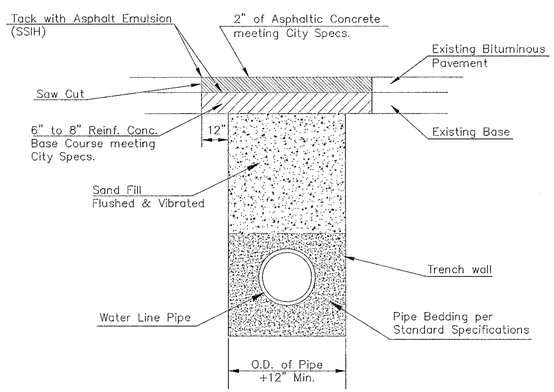

EXCAVATION FOR WET TAP




Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

SECTION B-B

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER




PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
07/21/15

REVISED: JULY 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

MISCELLANEOUS WATER DETAILS

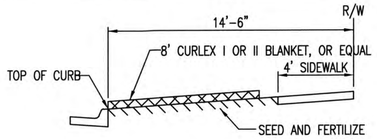
CITY ENGINEER
GARY JANZEN, P.E..

| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
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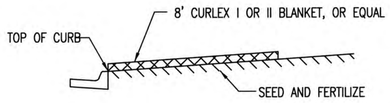
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455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

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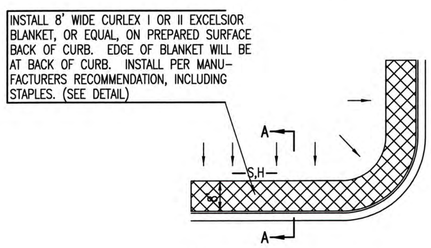
WL-104




SECTION B-B



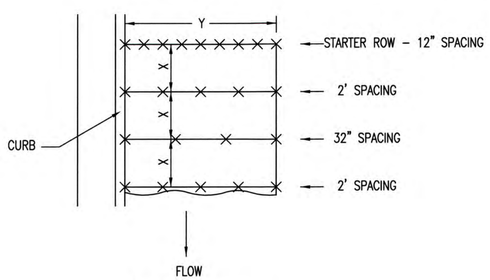

SECTION A-A




**GENERAL NOTES**

1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

## BACK OF CURB PROTECTION DETAIL

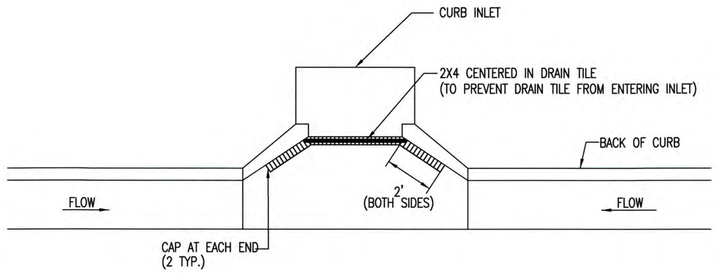



STAPLE PATTERN

STAPLE

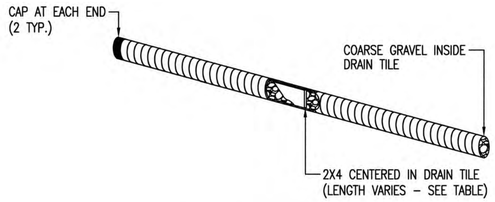
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

## DETAILS FOR APPROVED EROSION CONTROL MAT

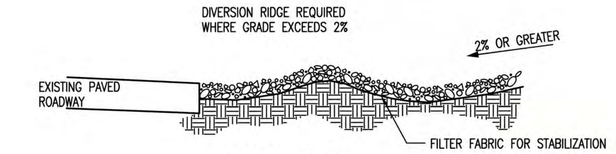



NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

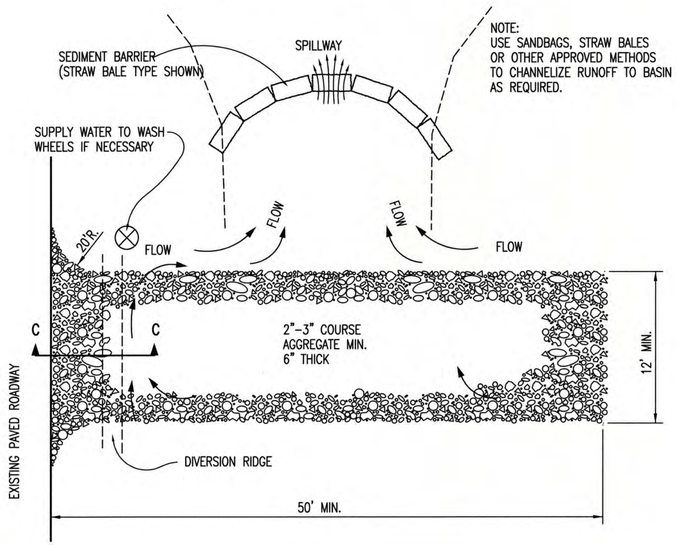
| 2X4 LENGTH | INLET TYPE | INLET OPENING |
|---|---|---|
| 5'-6" | 1-A | 5'-0" |
| 10'-6" | 1-A | 10'-0" |
| 15'-6" | 1-A | 15'-0" |




## CURB INLET PROTECTION
**4" PERFORATED PIPE W/ GRAVEL**




SECTION C-C




## STABILIZED CONSTRUCTION ENTRANCE

**GENERAL NOTES**

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED PROFESSIONAL KANSAS ENGINEER 16604
05/31/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

*BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE*

CITY ENGINEER
*GARY JANZEN, P.E.*

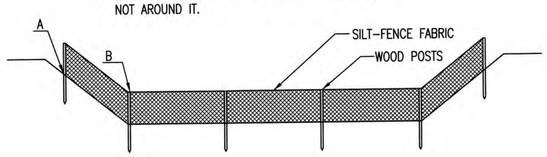
| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
| | | 5/2013 |

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*WICHITA, KANSAS 67202-1620*
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SHEET
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SW-501

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE SILT FENCE FABRIC AND NOT AROUND IT.




ELEVATION

## SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

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.
SILT FENCE DITCH 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 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 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.

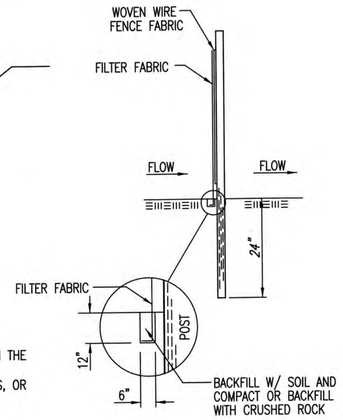
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

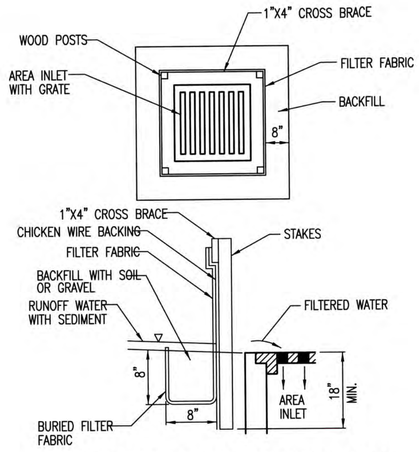
INSPECTION AND MAINTENANCE:

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?




ANCHOR TRENCH DETAIL




## 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 BARRIER FOR 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 OVERLAPPED 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:

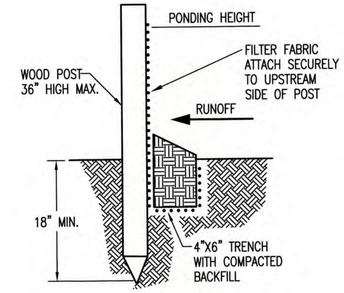
WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET–NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED.
DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER 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?




## 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' APART.
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, NAILS, 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?

REVISION DATE: MAY 2013

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

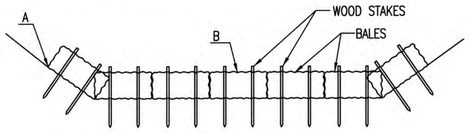
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| | | 5/2013 |

CITY ENGINEER'S OFFICE
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455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
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SHEET
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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.
STRAW BALE DITCH 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 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".

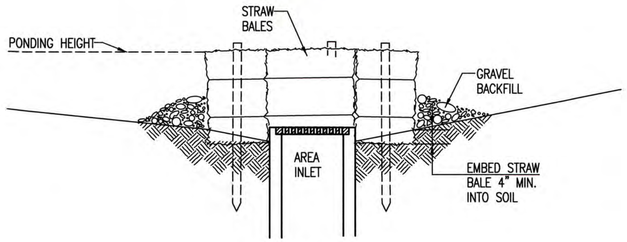
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

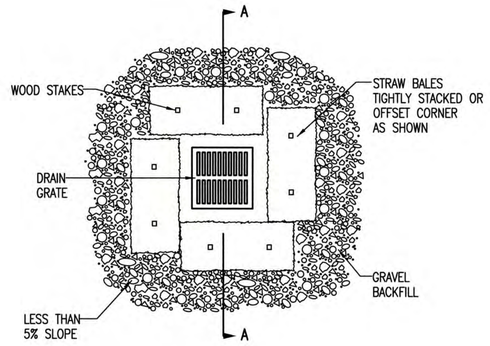
INSPECTION AND MAINTENANCE:

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.
TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

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.

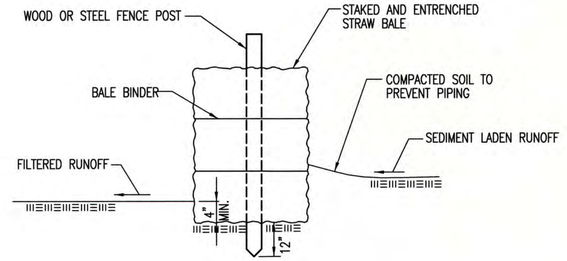
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 AND/OR WATER DAMAGE?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?




## 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.
TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

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 PRACTICAL, 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?

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/30/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
| | | 5/2013 |

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
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(316) 268-4501

SHEET
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SW-503

GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.

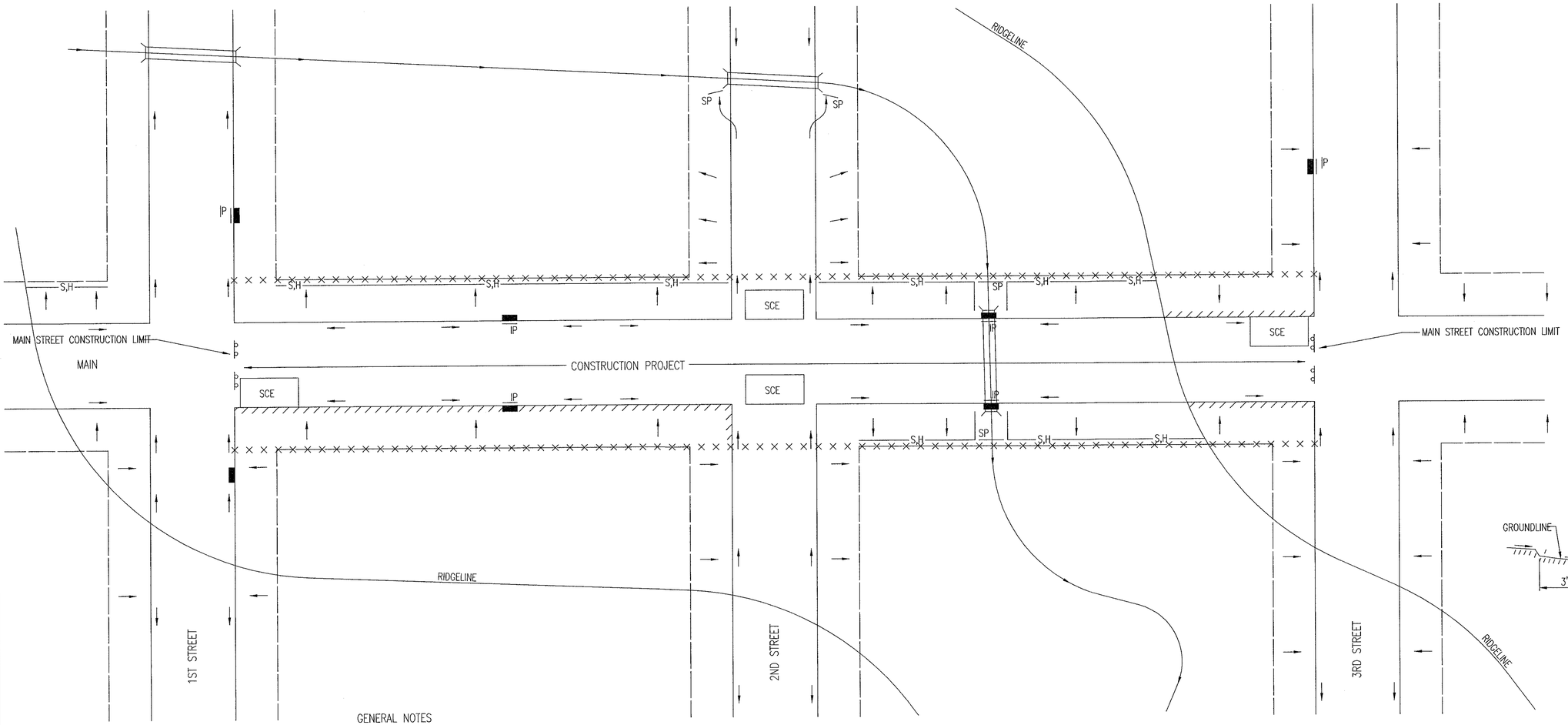
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

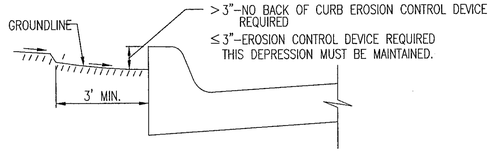
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

4. FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.

5. FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.

6. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.




## CURB BACKFILL DETAIL

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

LEGEND

- R-O-W LIMITS
- DRAINAGE FLOW PATH
- R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP — INLET PROTECTION
- S,H — SILT FENCE OR HAY BALE BARRIER
- SP — STREAM PROTECTION
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- BACK OF CURB PROTECTION

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.

2. THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.

3. EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.

4. INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.

5. EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.

6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.

7. ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.

8. THE CONTACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
   A. THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs – BACK OF CURB SEDIMENT BARRIER DETAILS)
   B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
   C. ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
   D. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

GARY L. JANZEN — LICENSED — 16294 — KANSAS — PROFESSIONAL ENGINEER
06/05/15

REVISION: JUNE 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STREET IMPROVEMENT PROJECTS

CITY ENGINEER
GARY JANZEN, P.E.

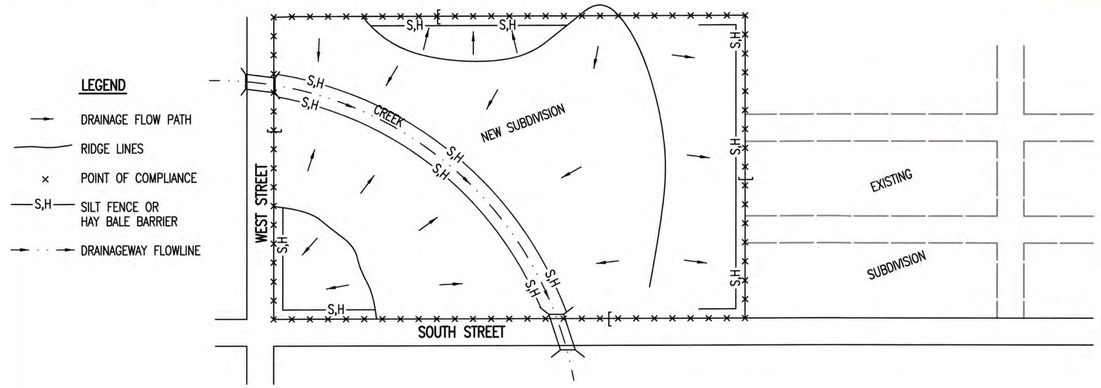
| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
| | | 11/2015 |

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
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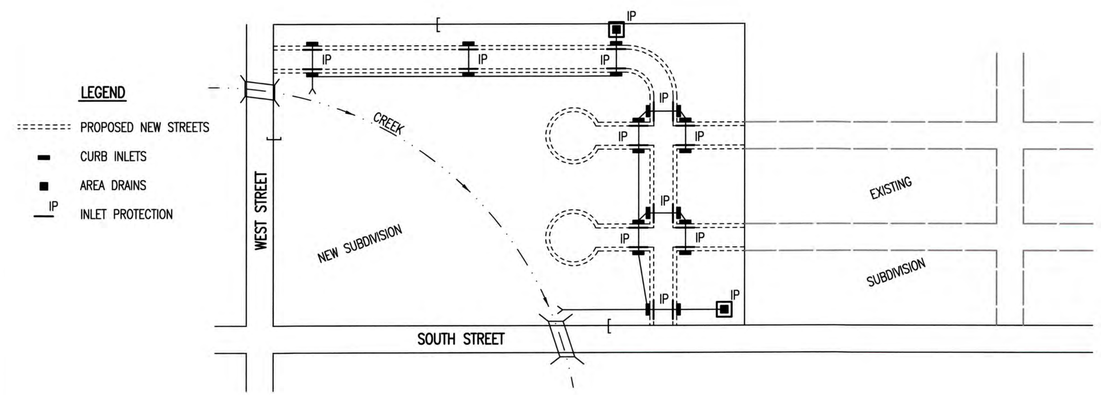
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## PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



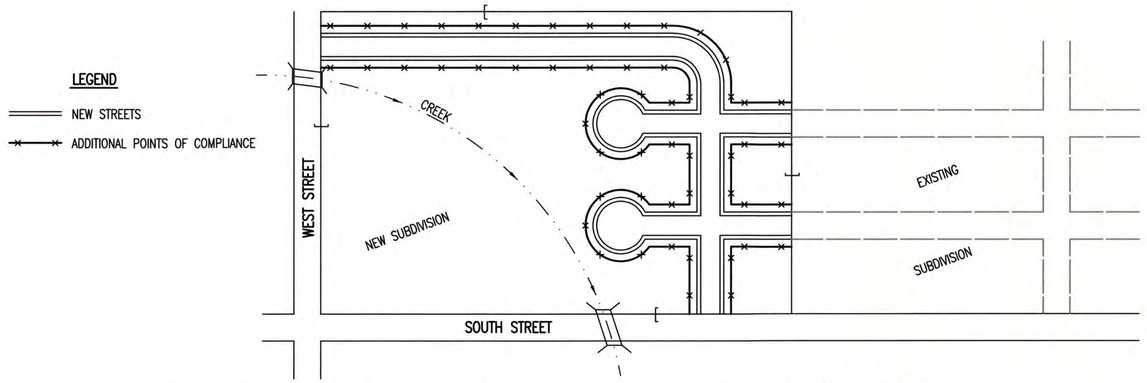

1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2. HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
3. SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
4. ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
5. CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
6. UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
7. IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
8. WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

## PHASE 2 – INSTALLATION OF STORM SEWER




1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
4. CURB OPENING INLETS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 – STREET CONSTRUCTION.
5. THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
6. THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
7. ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
8. ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

## PHASE 3 – STREET CONSTRUCTION

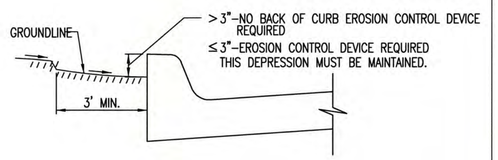



1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
   B. NON–SUMP LOCATIONS – PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
3. EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
4. SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
5. THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

### GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER OTHER DRAINAGE FEATURE.
2. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
3. EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
4. PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
5. THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
6. FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
7. FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
8. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
9. A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL




### CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/13/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

*SUBDIVISION DEVELOPMENT PROCESS*

CITY ENGINEER
*GARY JANZEN, P.E.*

| PROJECT NUMBER | OCA NUMBER | DATE |
|---|---|---|
| | | 5/2013 |

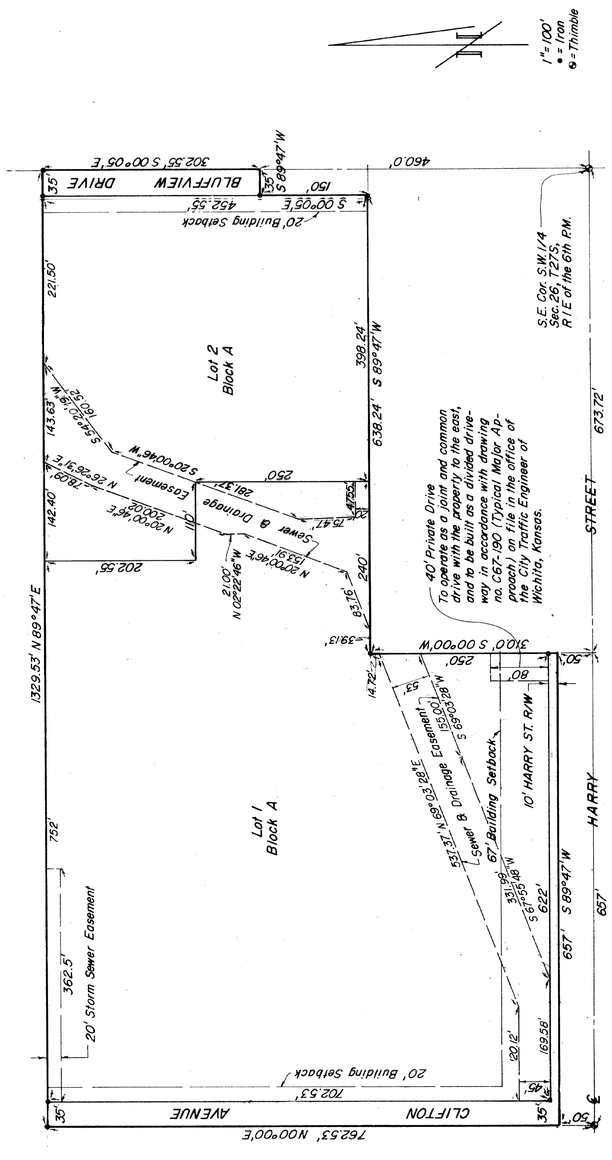
*CITY ENGINEER'S OFFICE*
*CITY HALL - SEVENTH FLOOR*
*455 NORTH MAIN STREET*
*WICHITA, KANSAS 67202-1620*
*(316) 268-4501*

SHEET
10 of 11

SW–505

# ST. JOSEPH MEDICAL PARK

## AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS




This plat of "ST. JOSEPH MEDICAL PARK" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 26th day of June, 1973.

Wichita-Sedgwick County Metropolitan Area Planning Commission

Marjorie L. Taylor, Chairman

Robert A. Lakin, Secretary

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 27th day of September, 1973.

James M. Dennis, Mayor

Ralph C. Eberly, City Clerk

This plat approved and all dedications shown hereon, if any, accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 17th day of October, 1973.

Earl E. Brush, Chairman

Elmer C. Hagenbarth, Commissioner

Tom Scott, Commissioner

STATE OF KANSAS, COUNTY OF SEDGWICK, SS:

This is to certify that this instrument was filed for record in the Register of Deeds Office, at 2:00 P.M. on the 19th day of October, 1973.

#171924

John Hale, Register of Deeds

Frank A. Gilliam, Deputy

Entered on transfer record this 19th day of Oct, 1973.

Marie Warden, County Clerk

FOR REFERENCE ONLY
NOT TO SCALE

STATE OF KANSAS, COUNTY OF SEDGWICK, SS:

I, Don C. Moehring II, a Civil Engineer in said State and County, do hereby certify that I have surveyed and platted "ST. JOSEPH MEDICAL PARK", an addition to Wichita, Sedgwick County, Kansas, into Lots, a Block, a Street, an Avenue, and a Drive, the same being accurately set forth in the accompanying plat and described as follows:

A tract in the Southeast Quarter of the Southwest Quarter of Sec. 26, T27S, R1E of the 6th P.M., in Sedgwick County, Kansas, described as follows: Commencing at a point 657 feet East and 310 feet North of the Southwest corner of said S.E.¼ of the S.W.¼ of Sec. 26; thence North parallel to the West line of said S.E.¼ of the S.W.¼ a distance of 638.24 feet; thence N53°21' West, 561.22 feet, more or less, to a point which is 561.22 feet South of the North line of said S.E.¼ of the S.W.¼ of Sec. 26; thence East parallel to the North line of said S.E.¼ of the S.W.¼ of Sec.26, a distance of 679.08 feet, more or less, to the East line of said S.E.¼ of the S.W.¼ of Sec. 26; thence South along the East line of said S.E.¼ of the S.W.¼ of Sec. 26, a distance of 673.72 feet to a point which is 460 feet North of the Southeast corner of said S.E.¼ of the S.W.¼ of Sec. 26; thence West along the North line of Lot 8, Morrell Addition to Wichita, Kansas, and parallel to the South line of said S.E.¼ of the S.W.¼ of Sec. 26, a distance of 373.36 feet, more or less, to the N.W. corner of said Lot 8, Morrell Addition to Wichita, Kansas; thence South along the West line of Lot 8, Morrell Addition to Wichita, Kansas a distance of 150 feet to the S.W. corner of Lot 8, Morrell Addition to Wichita, Kansas; thence West along the North line of Lot 7, Morrell Addition to Wichita, Kansas, a distance of 300 feet to the place of Beginning.

AND the West 657 feet of the Southeast 1 of the S.W.¼ of Section 26, T27S, R1E of the 6th P.M., in Sedgwick County, Kansas, except the North 561.22 feet thereof.

AND all of Lot Eight, Morrell Addition to Wichita, Sedgwick County, Kansas.

Don C. Moehring II
Consulting Engineers
Wichita, Kansas

DON C. MOEHRING II
REGISTERED
3463
KANSAS

Know all men by these presents that we the undersigned, property owners of the above described property, have caused the same to be surveyed and platted into Lots, a Block, a Street, an Avenue, and a Drive, the same to be known as "ST. JOSEPH MEDICAL PARK", an addition to Wichita, Sedgwick County, Kansas. Easements for the construction and maintenance of public utilities, and for drainage, as indicated on the accompanying plat, are hereby granted.

St. Joseph Hospital and Rehabilitation Center, a Kansas Corp.

Sister Mary Anne McNamara, President

Mother Mary Anne McNamara

Joseph A. Heeb, Secretary

Joseph A. Heeb

STATE OF KANSAS, COUNTY OF SEDGWICK, SS

Be it remembered that on this 21st day of Sept., 1973, before me, a Notary Public in and for said State and County, came St Joseph Hospital and Rehabilitation Center, a Kansas Corporation, by Mother Mary Anne McNamara, President and Joseph A. Heeb, Secretary, personally known to be the same persons who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Pauline L. Graham, Notary Public

My Commission expires February 12, 1976

Restrictions Corrected E 22 pg. 226

R 2 1-28

BAUGHMAN COMPANY
315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

VIA CHRISTI ST. JOSEPH EMERGENCY DEPT. Ph. 2

**COPY OF PLAT**

WATER DISTRIBUTION SYSTEM

PROJECT NUMBER: 23-09-E613

DESIGN: DRAWN:

DATE: May 1, 2024

SHEET 11 OF 11

File: E:\Projects\St. Joseph Hospital ED Expansion\Engineering\Phase 2\PPW\PPW.dwg