

Annual Report Permit Year 3 (2016)

for



TOWN OF DOUBLE OAK

Texas Commission on Environmental Quality
Texas Pollutant Discharge Elimination System
General Permit TXR040000

March 2017

Prepared By



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Texas Commission on Environmental Quality
Stormwater & Pretreatment Team Leader (MC-148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: Phase II MS4 Annual Report Transmittal for the Town of Double Oak
TPDES Permit Authorization: TXR040573

Dear Team Leader:

This letter serves to transmit the Year 3 Annual Report for the Texas Pollutant Discharge Elimination System Small Municipal Separate Storm Sewer System General Permit, Authorization Number TXR040573 for the Town of Double Oak.

A separate Notice of Change has not been submitted based on the fact that changes have not been proposed for the next permit year.

As required by the general permit, a copy of this submittal has also been mailed to the TCEQ's regional office in Fort Worth, Texas.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Donnelly", with a long horizontal flourish extending to the right.

Mike Donnelly
Town of Double Oak
Mayor

Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040573 Annual Reporting Year: (calendar year) 2016
Last day of fiscal year, if applicable: N/A

MS4 Operator Level: I Name of MS4/Permittee: Town of Double Oak

Contact Name: Mike Donnelly Telephone Number: (972) 539-9464

Mailing Address: 320 Waketon Road, Double Oak, TX 75077

E-mail Address: town_secretary@double-oak.com

B. Narrative Provisions (Part IV Section B.2.(a))

1. Provide information on the status of complying with permit conditions: (Part V - Standard Permit Conditions):

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	x		All BMP's for Year 3 have been completed.
Permittee is currently in compliance with recordkeeping and reporting requirements.	x		All documents are in compliance.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	x		Community does not discharge into an impaired water body.

2. Provide a general assessment of the appropriateness of the selected BMPs. Use table below or attach a summary, as appropriate (See Example 1 in instructions):

- The Town continues to enforce their Stormwater Ordinance that addresses the requirements for Erosion and Sediment Control, Post Construction Runoff and Pollution Prevention.
- There are no industrial areas in the town thus the possibility to discharge pollutants to the town’s stormwater systems are low.

MCM	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater? (Yes / No / Explain)
1	1.2	The Town has more views regarding stormwater education on their website as opposed to retrieved brochures at Town Hall.
2	2.3	The storm map was updated to include new storm drain culverts. Additional culverts are inspected after every rain event and regularly during the dry season.
3	3.3	Procedures and forms created for Construction Site Inspection of Runoff Controls.
4	4.1	Town to distribute education materials to contractors at pre-construction meetings.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as monitoring data) to evaluate reductions in the discharge of pollutants. Use a table or attach a narrative description as appropriate:

- There have been no known pollutants formerly detected; therefore, a demonstrated direct reduction cannot be evaluated. The following practices could result in non-tangible reductions.
 - ❖ MCM 1 BMP 1.2, 1.4 and MCM 2 BMP 2.4
 - Yes - Access to public educational materials on the Town website and the Mayor’s Editorial in the Cross Timbers Gazette could raise awareness for pollution prevention and reporting as well as result in reductions.

- ❖ MCM 2 BMP 2.2
 - Yes - The Public Works Director performs visual checks of stormwater during and post construction to check for pollutants and illicit discharges during dry season. There have been no illicit discharges observed but if observed they would be addressed immediately.

- ❖ MCM 3 – BMP 3.1
 - Yes – As needed, the Town continues to inspect developments with sites larger than 1 acre that have a SWPPP for their Construction Activities. Although a formal SWPPP is not mandatory for sites less than 1 acre, erosion protection is required. The Town’s Erosion Control ordinance requires a construction erosion control plan that needs to be reviewed by the Town Staff or Town Engineer to assure proper BMP’s are in place to reduce sediment discharge and erosion.

- Stormwater sampling, monitoring and analysis was not included in the Town's SWMP for Years 1-5

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (See Example 2 in instructions):

MCM(s)	Measurable Goal(s)	Success
1	BMP 1.1 – Distribute Stormwater Education Material	Met Goal – Early in the permit year it was determined that printed materials found to be useful but were available. Instead, several informational links are available on the Town’s website pertaining to water quality regarding residential, commercial and construction activities.
1	BMP 1.2- Stormwater Message(s) with Links on Town of Double Oak Website, Maintain Website	Met goal – Links to Public Education and Outreach on Stormwater Impacts are available on the Town website. The SWMP is also available at Town Hall and on the Town website.

MCM(s)	Measurable Goal(s)	Success
1	BMP 1.3- River/Stormwater System Volunteer Cleanups	Met goal – Two volunteer clean-ups were held. A storm system clean up yielded two 30 yard dumpsters in waste on March 14-2016. A Christmas tree collection and recycle program resulted in one 30 yard dumpster on December 27, 2016. The Town was unable to track the number of participants at each event as there were continuous arrivals and departures throughout each day.
1	BMP 1.4- Display SWMP on Town Website for Public Review and Comments	Met goal – Links to the SWMP and prior Annual Report are available on the Town website. No comments regarding SWMP through the Town website email link.
2	BMP 2.1- Implement Town Ordinance and Enforcement Procedures to Prohibit and Remove Illicit Discharges	Met goal – Prepared Draft Ordinances for Illegal Dumping and Illicit Discharge. Illicit Discharge Ordinance is based on NTCOG model. Ordinances will be reviewed and adopted in Year 4.
2	BMP 2 .2- Visual Inspection of Selected Stormwater Outfalls During Dry Weather	Met goal – Dry Weather inspection procedure has been developed and implemented into the Town Maintenance schedule. A multi-use inspection form has been developed and was and continue to be utilized.
2	BMB 2.3- Development of Storm Sewer Map Showing All Outfalls and Names of Waters of the United States	Met goal - Town Map has been updated and provided with the annual report. See attached.

MCM(s)	Measurable Goal(s)	Success
2	BMP 2.4-Educate Employees, Business, and the General Public (Hazards Associated With Illegal Discharges to the System)	<p>Met goal – On April 4, 2016 the Town Mayor included an article in the Cross Timbers Gazette titled “Spring Cleaning Tips” which included educational information about debris in flood areas, lawn waste in runoff, soil erosion and stream and wetland buffers. The Town’s website continues to display a link to the <i>Stormwater Education, Are We Keeping the Water Clean?</i> public education presentation which was given at Town Council on 10/19/2015. See attached.</p> <p>See also BMP 1.1</p>
3	BMP 3.1 - Implement/Maintain Ordinance and Enforcement Mechanism to Require Erosion and Sediment Control at site>1 Acre	<p>Met goal – Draft Erosion Control Ordinance has been prepared and is attached. Town continues to enforce current ordinances requiring SW3P and Erosion Control Plans for sites larger than 1 acre. Construction permits are not issued for sites disturbing more than 1 acre without SWPPP and complying with TCEQ General Permit TXR150000.</p>
3	BMP 3.2 - Require Submittal of Construction Site SWPPP for Review by Town Staff	<p>Met goal – Draft Construction Plan Checklist has been developed. The Town also implements a checklist for start of building construction which requires Erosion Control/SWPPP to be onsite and maintained throughout the project. Both documents are attached.</p> <p>Town enforces current ordinances requiring SW3P and Erosion Control Plans for sites larger than 1 acre. Construction permits are not issued for sites disturbing more than 1 acre without SWPPP and complying with TCEQ General Permit TXR150000</p>
3	BMP 3.4 - Train Town Inspector in Conducting Proper Site Inspections	<p>Met Goal – Town Public Works Director attended a 2 day training seminar on April 28th and 29th, 2016 hosted by NTCOG. Seminar main topic was BMP Maintenance & Post-Construction Inspection Certification. Seminar information and Certification attached.</p>

MCM(s)	Measurable Goal(s)	Success
3	BMP 3.5 - Implement mechanism for contractor Comment and Procedures for Comment Consideration in regard to Runoff Control	Met goal - Town has continued to monitor the link on the Town website during year 3 for comments from contractors and public regarding erosion control and runoff control. Previous year's forms are still being used for recording complaints. See attached. No reports or questions were received by the Town staff in Year 3.
4	BMP 4.1 - Create and Distribute Educational Materials for Area Developers regarding Post-Construction Stormwater Controls	Met goal – Town to continue to distribute checklists with Erosion Control requirements to contractors at pre-construction meetings and with building permit applications. For Year 4, the Town will include the links to the Illicit Discharge Ordinance and Erosion Control Ordinance as they are adopted by the Town. Information will be included with applicable building permits in regards to the location and requirement of the ordinances.
5	BMB 5.1- Assess Municipal Properties for Appropriate Stormwater Pollution Prevention Control	Met goal – Town facilities were inspected on July 1, 2016. No illicit discharge or source of pollution was determined from the inspection. Completed report form attached.

C. Stormwater Monitoring Data (Part IV Section B.2.(b))

1. The MS4 has conducted monitoring of stormwater quality and submitted in the annual report (i.e. analytical and visual observations).

Yes No

a. Explain below or attach a summary to submit along with any monitoring data used to evaluate the success of the SWMP at reducing pollutants to the maximum extent practicable. Be sure to include a discussion of results:

D. Impaired Waterbodies (Part IV Section B.2.(c))

1. If applicable, explain below or attach a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern:

Not Applicable

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (*Part II Section D.4.(a)*):

Not Applicable

Report the benchmark identified by the MS4 and assessment activities (*Part II Section D.4.(a)(6)*):

Not Applicable

3. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (*Part II Section D.4.(a)(4)*):

Not Applicable

5. If applicable, report on focused BMPs to address impairment (*Part II Section D.4.(a)(5)*):

Not Applicable

6. Describe progress in achieving the benchmark (*Part II.D.4.(a)(6)*):

Not Applicable

E. Stormwater Activities (Part IV Section B.2.(d))

Describe any stormwater activities the MS4 operator has planned for the next reporting year. Use the table or attach a summary, as appropriate:

MCM(s)	BMP	Stormwater Activity	Description/Comments
2	2.2	Prepare dry weather inspection procedure and form.	Dry Weather inspection procedure will be implemented into the Town Maintenance schedule. A multi-use inspection form has been developed and will continue to be utilized.

F. SWMP Modifications (Part IV Section B.2.(e))

1. Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's review.

Yes No

G. Additional BMPs (Part IV Section B.2.(f))

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans.

None

H. Additional Information (Part IV Section B.2.(g))

1. Is the permittee relying on another entity/ies to satisfy some of its permit obligations?

Yes No

If 'Yes,' provide the name(s) of other entity/ies and an explanation of their responsibilities (add more spaces or pages if needed):

2.a. Is the named permittee sharing a SWMP with other entities?

Yes No

2.b. If 'yes,' is this a system-wide annual report including information for all permittees?

Yes No

I. Construction Activities (Part IV Section B.2.(h-i))

1. The number of construction projects in the jurisdiction of the MS4 where the permittee was not the construction site operator (as provided in submittals to the MS4 operator via notices of intent or site notices) _____1_____

2. a. Does the permittee utilize the optional seventh MCM related to construction?

Yes No

2. b. If 'yes,' then provide the following information for this permit year:

Note: *Though the seventh MCM is optional, implementation must be requested on the NOI or on a NOC and approved by the TCEQ.*

J. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): MIKE DONNELLY Title: MAYOR

Signature:  Date: 3/30/17

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Note: If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

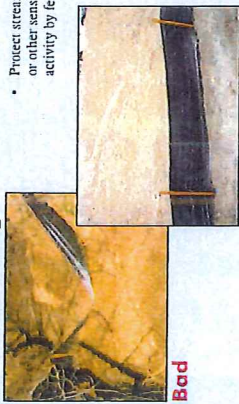
Stormwater and the Construction Industry

Protect Natural Features



- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

Silt Fencing



- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

Construction Phasing



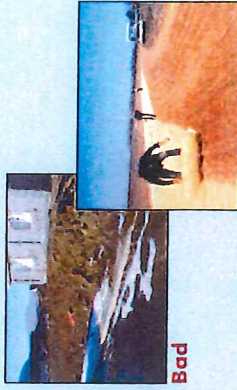
- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Vegetative Buffers



- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Site Stabilization

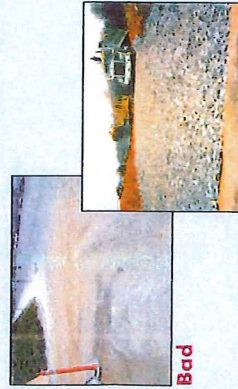


- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Maintain your BMPs!

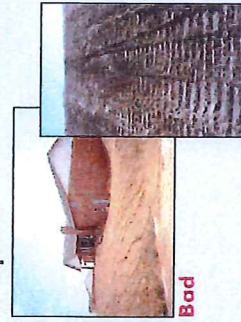
www.epa.gov/npdes/menuofbmps

Construction Entrances



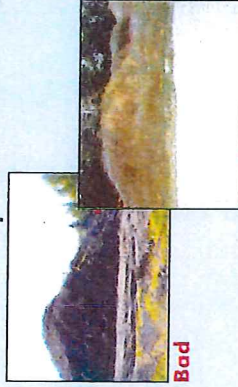
- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

Slopes



- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or underdrain, or divert stormwater away from slopes.

Dirt Stockpiles



- Cover or seed all dirt stockpiles.

Storm Drain Inlet Protection



- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

Stormwater and the Construction Industry Planning and Implementing Erosion and Sediment Control Practices

The construction industry is a critical participant in the nation's efforts to protect streams, rivers, lakes, wetlands, and oceans. Through the use of best management practices (BMPs), construction site operators are the key defense against erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals. High volumes of stormwater can also cause stream bank erosion, and destroy downstream aquatic habitats. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, and address sedimentation. Storm drains, replace poorly installed BMPs, and mitigate damage to other people's property or to natural resources.

Best Management Practice (BMP)

A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Soil fences, silt prevention, and silt-stabilization techniques are typical BMPs on a construction site.

An operator is someone who has control over and the ability to modify construction plans and specifications (e.g. owner, general contractor) or

Someone who has control over the day-to-day operations at a site (i.e. owner, general contractor) that are necessary to ensure compliance with the permit requirements. It is the responsibility of a construction site owner or operator to ensure stormwater runoff and prevent erosion during all stages of a project.

There may be more than one person at a site who meets these definitions and must apply for permit coverage. States may have different definitions of the term "operator."

So what's being done about polluted runoff?

The Clean Water Act includes the National Pollutant Discharge Elimination System (NPDES) permitting program. As of January 2005, 45 states and territories are authorized to issue NPDES stormwater permits. If your state isn't authorized, you must get an NPDES stormwater permit from EPA. Your permit will specify the requirements for your site's NPDES stormwater permit program. In general, construction permits require construction operators to do all of the following:

- Develop and implement a stormwater pollution prevention plan
- Submit a permit application or notice of intent (NOI)
- Comply with the permit, including maintaining BMPs and inspecting the site
- Under the NPDES program, construction activities that disturb 1 or more acres are required to obtain stormwater permit coverage. States have different names for the plans that construction operators must develop, such as stormwater pollution prevention plan
- Erosion and sediment control plan
- Erosion control and stormwater management plan
- Stormwater management plan
- Water-pollution control plan
- Pollution prevention plan

This document uses the term "Plan."

I think I need a permit... Where do I start?

All land-disturbing activities, including clearing, grading, and excavation, that disturb 1 or more acres are required to be covered under a state or EPA-authorized NPDES construction stormwater permit in your state. You might already be subject to local erosion and sediment control requirements, but that doesn't release you from the requirements of the NPDES program at the state or EPA level. Although you must comply with both sets of requirements, in most cases they have been designed to be complementary. Contact your permitting authority to find out exactly what you need to do. A good place to start is the Construction Industry Compliance Association web site at <http://www.cicwa.org>.

The NPDES permit requirements include a "full construction activities" that are part of a larger common plan of development or sale, such as a single lot within a larger subdivision. For developments with multiple operators, all operators must have permit coverage for the individual parts of the larger development, no matter how large or small each operation happens to be. When there are multiple operators at one site, they're encouraged to develop and share one comprehensive Plan and obtain permit coverage as co-permittees.

The owner or operator of the construction site is responsible for complying with the requirements of the permit. Responsibilities include developing a Plan, obtaining permit coverage, implementing BMPs, and stabilizing the site at the end of the construction activity.

Determine your eligibility
All construction activity that disturbs 1 or more acres of land, as well as activity that disturbs less than 1 acre but is part of a larger common plan of development, must obtain permit coverage.

Read and understand your stormwater permit requirements
Get a copy of the permit for construction activities and a permit application (or notice of intent) from your state or EPA permitting authority.

Develop a Plan
Most states do not require you to submit your Plan. However, you do need to keep the Plan on site. If that's impractical, you may post a notice that tells where the Plan is kept so it can be accessed by the permitting authority and other interested parties.

You'll need to post a copy of your completed application on site. Put it in a place where the public can see it so they'll know your site is covered by an NPDES permit!

Apply for permit coverage
Once you understand your permit requirements and have developed a Plan, you can submit a stormwater permit application to your state or EPA permitting authority. This must be done before beginning any land disturbance on the site. Some states require a copy of the Plan to be submitted with your permit application. Once you've submitted the application, you must accept the conditions of the permit.

Implement the Plan
Begin by implementing the BMPs in your Plan before construction begins. Ensure that BMPs are properly maintained, and upgrade and repair them as necessary.

Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. These Plans require a number of planning and training to ensure proper implementation of the BMPs.

- Advance planning and training to ensure proper implementation of the BMPs
- Pollution prevention BMPs to keep the construction site "clean"
- Regular inspection of the construction site to ensure proper installation and maintenance of BMPs

Fortunately, the practices and measures that must be included in your Plan are already part of the standard operating procedures at many construction sites. Six steps are associated with developing and implementing a stormwater Plan. There's a wealth of information available on developing pollution prevention Plans. Please contact your permitting authority for help in finding additional guidance, materials, or visit www.epa.gov/npdes/stormwater. A sample construction Plan is available at www.epa.gov/npdes/pubs/planbook_v010901.pdf.

1. Site Evaluation and Design Development

- Collect site information
 - Develop site plan design
 - Prepare pollution prevention site map
- The first step in preparing a Plan is to define the characteristics of the site and the type of construction that will occur. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.

2. Assessment

- Measure the site area
 - Determine the drainage areas
 - Calculate the runoff coefficient
- The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities for each drainage area. For more information on calculating the runoff coefficients, go to www.epa.gov/npdes/pubs/compguide.pdf, page 11.

3. Control Selection and Plan Design

- Review and incorporate state or local requirements
- Select erosion and sediment controls
- Select stormwater management controls
- Indicate the location of controls on the site map
- Prepare an inspection and maintenance plan
- Coordinate controls with construction activity
- Prepare equipment of major activities

In the third step you'll actually assess your project's needs to prevent and control polluted stormwater runoff. You must delineate areas that will be disturbed, including critical natural areas like streambeds, floodplains, and trees. You must also identify the measures (or BMPs) you'll use to protect these areas.

Soil erosion control tips...

- Design the site to minimize erosion rates from the ground and to keep it out of storm drains. Eliminate or minimize the use of contractor vehicles and equipment systems while maintaining the use of stormwater collection and treatment technologies.
- To the extent possible, plan the project in stages to minimize the amount of area that is bare and subject to erosion. This will prevent the erosion and debris that will be a control erosion.
- Erosion control measures should be installed on exposed areas as soon as possible. Sediment control measures should be installed on exposed areas as soon as possible.
- Vegetate or cover steep slopes that will not be used immediately.
- Reduce the velocity of stormwater both into and away from the project area.
- Interceptors, dividers, vegetated buffers, and check dams are a few of the BMPs that can be used to reduce the velocity of stormwater.
- Diversion measures can also be used to direct flow away from exposed areas toward stable portions of the site.
- Silt fences and other types of perimeter filters should never be used to reduce the velocity of stormwater.
- Properly placed check dams, vegetated buffers, and other stabilization measures should be used to slow down stormwater and reduce erosion.
- Sediment traps, silt fences, or other stabilization measures should be used to slow down stormwater and reduce erosion.
- Check dams can be used to slow down stormwater and reduce erosion.
- Regular street cleaning and other maintenance measures will prevent dirt from entering storm drains.
- Do not use gravel areas.
- Regular street cleaning and other maintenance measures will prevent dirt from entering storm drains.
- Maintain all BMPs in excellent condition to ensure their effectiveness throughout the life of the project.
- Regularly inspect and maintain all BMPs, including silt fences, traps, and other BMPs.
- Regularly remove sediment from silt fences, traps, and other BMPs.
- Maintain areas that protect sensitive areas, like floodplains, stream channels, and other BMPs.

Other BMPs and Activities to Control Polluted Runoff

- You'll need to select other controls to address potential pollution sources on your site. Construction materials, debris, trash, fuel, paint, and solvents become pollution sources if they are not properly managed. The following are some examples of other BMPs and activities that can help reduce the amount of pollution leaving construction sites. The following are some examples of other BMPs and activities that can help reduce the amount of pollution leaving construction sites. The following are some examples of other BMPs and activities that can help reduce the amount of pollution leaving construction sites.
- Keep potential sources of pollution out of the run as much as possible (e.g. in a building, covered with plastic or tarp, or sealed up as a hazardous material).
- Clearly identify, protect, fence, and control truck wash areas. This area should be located away from streams, storm drain inlets, or ditches and should be cleaned and maintained.
- Park, rest, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and dirt storage. This area should be well away from streams, storm drain inlets, or ditches.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers. Keep all waste on site in a minimize-leaking container.
- Store materials and equipment in one area of the site to minimize the area exposed to possible spills and dirt storage. This area should be well away from streams, storm drain inlets, or ditches.
- Dispose of hazardous materials properly.

4. Certification and Notification

- Certify the Plan
 - Submit permit application or notice of intent
- Once the Plan has been developed, an authorized representative of the operator must certify the Plan. Your permit might require that the Plan be kept on site, or be available for the staff implementing the Plan.

Erosion and sedimentation control practices are only as good as their installation and maintenance.

5. Implementing a Plan Maintaining a Plan

- Implement controls
- Inspect and maintain controls
- Update/change the Plan
- Report releases of hazardous materials

A Plan describes the practices and activities you'll use to prevent erosion and sedimentation. The Plan is only as good as its implementation. Make sure that the Plan is implemented, and that the Plan is updated as necessary to reflect changes on the site.

Erosion and sedimentation control practices are only as good as their installation and maintenance. Train the contractors that will install the BMPs, and inspect immediately to ensure that the BMPs have been installed correctly.

Regularly inspect the BMPs (especially before and after rain events) and perform a visual inspection of signs of maintenance. Many BMPs, especially silt fences, become ineffective and a source of sediment pollution.

It's also important to keep records of BMP installation, implementation, and maintenance. Keep track of major grading activities that occur on the site, when construction activities cease (temporarily or permanently), and when a site is temporarily or permanently stabilized.

6. Completing the Project: Final Stabilization and Termination of the Permit

- Final stabilization
- Notice of Termination
- Record retention

Many states and EPA require a Notice of Termination (NOT) or other notification specifying that the construction activity is completed. An NOT is required when:

- Final stabilization has been achieved on all portions of the site for which the permit is responsible
- Another operator has assumed control over all areas of the site that have not been finally stabilized. That operator would need to submit a new permit application to the permitting authority.
- For residential construction only, temporary stabilization of a portion of the site has been achieved and the homeowner has agreed to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization. This period may be longer depending on state and local requirements.

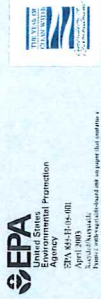
Preconstruction Checklist

- Nature of the activity
- Intended sequence of major construction activities
- Location of the site
- Erosion and sedimentation control practices
- A site description, including:
 - Area of soil disturbance
 - Outline of areas which will not be disturbed
 - Location of major structural and nonstructural soil erosion
 - Areas where stabilization practices are expected to occur
 - Surface waters
 - Stormwater discharge locations
 - Names of the receiving waters
 - A description of controls:
 - Erosion and sediment controls, including:
 - Structural practices for all areas disturbed by construction
 - Non-structural practices for all areas disturbed by construction
 - Measures used to control erosion and sedimentation
 - Measures used to control erosion and sedimentation
 - Velocity dissipative devices to provide nonerosive flow conditions from the discharge point along the length of any artificial channel
 - Other controls, including:
 - Disposal practices that prevent discharge of solid materials
 - Measures to minimize other tracking, or sediment by construction vehicles
 - Measures to ensure compliance with state or local waste disposal, sanitary sewer, or septic system regulations
 - Disposal of materials during the construction when measures will be implemented to prevent tracking of sediment
 - State or local requirements incorporated into the Plan

Implementation Checklist

- Maintain records of construction activities, including:
 - Dates when major grading activities occur on the site or a portion of the site
 - Dates when construction activities temporarily cease on the site or a portion of the site
 - Dates when stabilization measures are completed on the site
- Prepare inspection reports summarizing:
 - BMPs inspected
 - Names of person conducting BMP inspections
 - Observations
 - Necessary changes to the Plan
- Report releases of reportable quantities of air or hazardous materials
- Notify the National Response Center at 800-424-9693 immediately
- Report releases to your permitting authority immediately, or as specified in your permit. You must also provide a written report
- Modify the Plan to include:
 - The date of release
 - Circumstances leading to the release
 - Steps taken to prevent recurrence of the release
- Modify Plan as necessary
- For residential construction only, obtain a copy of the Plan from the homeowner
- Address changes in design, construction operation, or maintenance that affect the potential for discharge of pollutants

An ounce of prevention is worth a pound of cure! It's far more efficient and cost-effective to prevent pollution than it is to try to correct problems later. Installing and maintaining simple BMPs and pollution prevention techniques on site can greatly reduce the potential for stormwater pollution and can also save you money!



Visit www.epa.gov/npdes/stormwater for more information.

BMP 1.3

Storm Clean Up Dumpsters and Christmas Tree Dumpsters:

Storm Clean Up – Two 30 yard dumpsters on 03-14-2016

Christmas Tree Recycle – One 30 yard on 12-27-2016

BMP 1.5

No public comments were made.

Sec. 8.104 Littering and Dumping

(a) It shall be unlawful for any person to throw or deposit in or on any public road, street or alley, any public highway, or in or on any public property of any nature in the Town of Double Oak, any glass bottles, glass, nails, tacks, hooks, wire, cans, box, bale, bundle, sack, paper, pasteboard box, cloth or any other kind of rubbish ~~or~~, trash or appliance including clothes washers, clothes dryers, refrigerators, small kitchen appliances, toaster ovens, microwaves, or home goods such as mattresses, foam padding, coolers, hardware, dishes and textiles.

(b) It shall be unlawful for any person to throw or deposit in or on any private property, not belonging to or under the control of such person, any bottles, glass, nails, tacks, hooks, wire, cans, box, bale, bundle, sack, paper, pasteboard box, cloth or any other kind of rubbish ~~or~~, trash or appliance including clothes washers, clothes dryers, refrigerators, small kitchen appliances, toaster ovens, microwaves, or home goods such as mattresses, foam padding, coolers, hardware, dishes and textiles. It shall also be littering if a person allows litter on private property to be blown or carried onto the property of others.

(c) It shall be unlawful for a person to intentionally or knowingly allow occupants of the vehicle he is in control of to litter any street, easement, right-of-way, public property, or private property not belonging to him.

(d) (1) It shall be unlawful for the owner, agent or contractor in charge of any construction or demolition site to cause, maintain, permit or allow to be caused, maintained or permitted the accumulation of any litter on the site before, during or after completion of the construction or demolition project.

(2) It shall be the duty of the owner, agent contractor to have on the site adequate containers for the disposal of litter.

(3) The owner, agent, or contractor may be required at any time to show proof of appropriate collection or if transported by self, of final disposition at an authorized facility.

MODEL STORM WATER ORDINANCE

* * *

I. GENERAL PROVISIONS

* * *

C. Abbreviations

The following abbreviations when used in this Ordinance shall have the designated meanings:

- BMP - Best Management Practices
- BTEX - Benzene, Toluene, Ethylbenzene, and Xylene
- CFR - Code of Federal Regulations
- EPA - U.S. Environmental Protection Agency
- HHW - Hazardous Household Waste
- mg/l - Milligrams per liter
- MS4 - Municipal Separate Storm Sewer System
- NOI - Notice of Intent
- NOT - Notice of Termination
- NPDES- National Pollutant Discharge Elimination System
- ppb - Parts per billion
- PST - Petroleum Storage Tank
- [• RLA - Registered Landscape Architect]
- RPE - Registered Professional Engineer
- RQ - Reportable Quantity
- SWPPP- Storm Water Pollution Prevention Plan
- TPH - Total Petroleum Hydrocarbons
- USC - United States Code

D. Definitions

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this Ordinance, shall have the meanings hereinafter designated.

1. Agricultural storm water runoff. Any storm water runoff from orchards, cultivated crops, pastures, range lands, and other non-point source agricultural activities, but not discharges from concentrated animal feeding operations as defined in 40 CFR Section 122.23 or discharges from concentrated aquatic animal production facilities as defined in 40 CFR Section 122.24.
2. Best management practices (BMP). Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to

prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

3. City. The City of _____, Texas, or the City Council of _____.
4. City Engineer. The person appointed to the position of City Engineer by the City Council of the City of _____ or his/her duly authorized representative.
5. Coal pile runoff. The rainfall runoff from or through any coal storage pile.
6. Commencement of construction. The disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.
7. Commercial. Pertaining to any business, trade, industry, or other activity engaged in for profit.
8. Director of Public Works. The person appointed to the position of Director of Public Works by the City Council of the City of _____ or his/her duly authorized representative.
9. Discharge. Any addition or introduction of any pollutant, storm water, or any other substance whatsoever into the municipal separate storm sewer system (MS4) or into waters of the United States.
10. Discharger. Any person who causes, allows, permits, or is otherwise responsible for, a discharge, including, without limitation, any operator of a construction site or industrial facility.
11. Domestic sewage. Human excrement, gray water (from home clothes washing, bathing, showers, dishwashing, and food preparation), other wastewater from household drains, and waterborne waste normally discharged from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories, and institutions, that is free from industrial waste.
12. Environmental Protection Agency (EPA). The United States Environmental Protection Agency, the regional office thereof, any federal department, agency, or commission that may succeed to the authority of the EPA, and any duly authorized official of EPA or such successor agency.
13. Extremely hazardous substance. Any substance listed in the Appendices to 40 CFR Part 355, Emergency Planning and Notification.
14. Facility. Any building, structure, installation, process, or activity from which there is or may be a discharge of a pollutant.
15. Fertilizer. A solid or non-solid substance or compound that contains an essential plant nutrient element in a form available to plants and is used primarily for its essential plant nutrient element content in promoting or stimulating growth of a plant or improving the quality of a crop, or a mixture of two or more fertilizers. The term does not include the excreta of an animal, plant remains, or a mixture of those substances, for which no claim of essential plant nutrients is made.
16. Final stabilization. The status when all soil disturbing activities at a site have been completed, and a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent

structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

17. Fire Department. The Fire Department of the City of _____ or any duly authorized representative thereof.
18. Fire protection water. Any water, and any substances or materials contained therein, used by any person other than the Fire Department to control or extinguish a fire.
19. Garbage. Putrescible animal and vegetable waste materials from the handling, preparation, cooking, or consumption of food, including waste materials from markets, storage facilities, and the handling and sale of produce and other food products.
20. Harmful quantity. The amount of any substance that will cause pollution of water in the State.
21. Hazardous household waste (HHW). Any material generated in a household (including single and multiple residences, hotels and motels, bunk houses, ranger stations, crew quarters, camp grounds, picnic grounds, and day use recreational areas) by a consumer which, except for the exclusion provided in 40 CFR § 261.4(b)(1), would be classified as a hazardous waste under 40 CFR Part 261.
22. Hazardous substance. Any substance listed in Table 302.4 of 40 CFR Part 302.
23. Hazardous waste. Any substance identified or listed as a hazardous waste by the EPA pursuant to 40 CFR Part 261.
24. Hazardous waste treatment, disposal, and recovery facility. All contiguous land, and structures, other appurtenances and improvements on the land, used for the treatment, disposal, or recovery of hazardous waste.
25. Herbicide. A substance or mixture of substances used to destroy a plant or to inhibit plant growth.
26. Industrial waste. Any waterborne liquid or solid substance that results from any process of industry, manufacturing, mining, production, trade, or business.
27. Motor vehicle fluids. Any vehicle crankcase oil, antifreeze, transmission fluid, brake fluid, differential lubricant, gasoline, diesel fuel, gasoline/alcohol blend, and any other fluid used in a motor vehicle.
28. Municipal landfill (or landfill). An area of land or an excavation in which municipal solid waste is placed for permanent disposal, and which is not a land treatment facility, a surface impoundment, an injection well, or a pile (as these terms are defined in regulations promulgated by the Texas Natural Resource Conservation Commission).
29. Municipal separate storm sewer system (MS4). The system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned and operated by the City and designed or used for collecting or conveying storm water, and which is not used for collecting or conveying sewage.

30. Municipal solid waste. Solid waste resulting from or incidental to municipal, community, commercial, institutional, or recreational activities, and includes garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and other solid waste other than industrial waste.
31. NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (or Industrial General Permit). The Industrial General Permit issued by EPA on August 27, 1992, and published in Volume 57 of the Federal Register at page 41304 on September 9, 1992, and any subsequent modifications or amendments thereto.
32. NPDES General Permit for Storm Water Discharges from Construction Sites (or Construction General Permit). The Construction General Permit issued by EPA on August 27, 1992, and published in Volume 57 of the Federal Register at page 41217 on September 9, 1992, and any subsequent modifications or amendments thereto.
33. NPDES permit. A permit issued by EPA (or by the State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.
34. Non-point source. Any source of any discharge of a pollutant that is not a point source.”
35. Notice of Intent (NOI). The Notice of Intent that is required by either the industrial General Permit or the Construction General Permit.
36. Notice of Termination (NOT). The Notice of Termination that is required by either the industrial General Permit or the Construction General Permit.
37. Oil. Any kind of oil in any form, including, but not limited to, petroleum, fuel oil, crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure, sludge, oil refuse, and oil mixed with waste.
38. Operator. The person or persons who, either individually or taken together, meet the following two criteria: (1) they have operational control over the facility specifications (including the ability to make modifications in specifications); and (2) they have the day-to-day operational control over those activities at the facility necessary to ensure compliance with pollution prevention requirements and any permit conditions.
39. Owner. The person who owns a facility or part of a facility.
40. Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all federal, state, and local governmental entities.
41. Pesticide. A substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, or any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant (as these terms are defined in Section 76.001 of the Texas Agriculture Code).
42. Petroleum product. A petroleum product that is obtained from distilling and processing crude oil and that is capable of being used as a fuel for the propulsion of a motor vehicle or aircraft, including motor gasoline, gasohol,;

- other alcohol blended fuels, aviation gasoline, kerosene, distillate fuel oil, and # 1 and #2 diesel. [The term does not include naphtha-type jet fuel, kerosene-type jet fuel, or a petroleum product destined for use in chemical manufacturing or feedstock of that manufacturing.]
43. Petroleum storage tank (PST). Any one or combination of aboveground or underground storage tanks that contain petroleum products and any connecting underground pipes.
44. Point source. Any discernable, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
45. Pollutant. Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. The term “pollutant” does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated range land, pasture land, and farm land.
46. Pollution. The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the State that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.
47. Qualified personnel. Persons who possess the appropriate competence, skills, and ability (as demonstrated by sufficient education, training, experience, and/or, when applicable, any required certification or licensing) to perform a specific activity in a timely and complete manner consistent with the applicable regulatory requirements and generally-accepted industry standards for such activity.
- [48. Registered landscape architect (RLA). A person who has been duly licensed and registered to practice landscape architecture by the Texas Board of Architectural Examiners.]
49. Registered professional engineer (RPE). A person who has been duly licensed and registered by the State Board of Registration for Professional Engineers to engage in the practice of engineering in the State of Texas.
50. Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the municipal separate storm sewer system (MS4) or the waters of the United States.
51. Reportable quantity (RQ). For any “hazardous substance,” the quantity established and listed in Table 302.4 of 40 CFR Part 302; for any “extremely hazardous substance,” the quantity established in 40 CFR Part 355 and listed in Appendix A thereto.

52. Rubbish. Nonputrescible solid waste, excluding ashes, that consist of (A) combustible waste materials, including paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, yard trimmings, leaves, and similar materials; and (B) noncombustible waste materials, including glass, crockery, tin cans, aluminum cans, metal furniture, and similar materials that do not burn at ordinary incinerator temperatures (1600 to 1800 degrees Fahrenheit).
53. Sanitary sewer (or sewer). The system of pipes, conduits, and other conveyances which carry industrial waste and domestic sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, to the City sewage treatment plant (and to which storm water, surface water, and groundwater are not intentionally admitted).
54. Septic tank waste. Any domestic sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.
55. Service station. Any retail establishment engaged in the business of selling fuel for motor vehicles that is dispensed from stationary storage tanks.
56. Sewage (or sanitary sewage). The domestic sewage and/or industrial waste that is discharged into the City sanitary sewer system and passes through the sanitary sewer system to the City sewage treatment plant for treatment.
57. Site. The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.
58. Solid waste. Any garbage, rubbish, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including, solid, liquid, semi-solid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations, and from community and institutional activities.
59. State. The State of Texas.
60. Storm water. Storm water runoff, snow melt runoff, and surface runoff and drainage.
61. Storm water discharge associated with industrial activity. The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant which is within one of the categories of facilities listed in 40 CFR § 122.26(b)(14), and which is not excluded from EPA's definition of the same term.
62. Storm water pollution prevention plan (SWPPP). A plan required by either the Construction General Permit or the Industrial General Permit and which describes and ensures the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with construction or other industrial activity at the facility.
63. Uncontaminated. Not containing a harmful quantity of any substance.
64. Used oil (or used motor oil). Any oil that has been refined from crude oil or a synthetic oil that, as a result of use, storage, or handling, has become unsuitable for its original purpose because of impurities or the loss of original

properties but that may be suitable for further use and is recyclable in compliance with State and federal law.

65. Water in the State (or water). Any groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the State, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the State or inside the jurisdiction of the State.
66. Water quality standard. The designation of a body or segment of surface water in the State for desirable uses and the narrative and numerical criteria deemed by the State to be necessary to protect those uses, as specified in Chapter 307 of Title 31 of the Texas Administrative Code.
67. Waters of the United States. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters, including interstate wetlands; all other waters the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce; all impoundments of waters otherwise defined as waters of the United States under this definition; all tributaries of waters identified in this definition; all wetlands adjacent to waters identified in this definition; and any waters within the federal definition of “waters of the United States” at 40 CFR § 122.2; but not including any waste treatment systems, treatment ponds, or lagoons designed to meet the requirements of the federal Clean Water Act.
68. Wetland. An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
69. Yard waste. Leaves, grass clippings, yard and garden debris, and brush that results from landscaping maintenance and land-clearing operations.

II. GENERAL PROHIBITION

- A. No person shall introduce or cause to be introduced into the municipal separate storm sewer system (MS4) any discharge that is not composed entirely of storm water.
- B. It is an affirmative defense to any enforcement action for violation of Subsection A of this section that the discharge was composed entirely of one or more of the following categories of discharges:
 - 1. A discharge authorized by, and in full compliance with, an NPDES permit (other than the NPDES permit for discharges from the MS4);
 - 2. A discharge or flow resulting from fire fighting by the Fire Department;
 - 3. A discharge or flow of fire protection water that does not contain oil or hazardous substances or materials [that the Fire Code in this Code of Ordinances requires to be contained and treated prior to discharge, in which case treatment adequate to remove harmful quantities of pollutants must have occurred prior to discharge];
 - 4. Agricultural storm water runoff;
 - 5. A discharge or flow from water line flushing, but not including a discharge from water line disinfection by superchlorination or other means unless [the total residual chlorine (TRC) has been reduced to less than _____ mg/l and] it contains no harmful quantity of [chlorine or] any [other] chemical used in line disinfection;
 - 6. A discharge or flow from lawn watering, [or] landscape irrigation [, or other irrigation water];
 - 7. A discharge or flow from a diverted stream flow or natural spring;
 - 8. A discharge or flow from uncontaminated pumped groundwater or rising groundwater;
 - 9. Uncontaminated groundwater infiltration (as defined as 40 C.F.R. § 35.2005(20)) to the MS4;
 - 10. Uncontaminated discharge or flow from a foundation drain, crawl space pump, footing drain [, or sump pump];
 - 11. A discharge or flow from a potable water source not containing any harmful substance or material from the cleaning or draining of a storage tank or other container;

12. A discharge or flow from air conditioning condensation that is unmixed with water from a cooling tower, emissions scrubber, emissions filter, or any other source of pollutant;
 13. A discharge or flow from individual residential car washing;
 14. A discharge or flow from a riparian habitat or wetland;
 15. A discharge or flow from water used in street washing that is not contaminated with any soap, detergent, degreaser, solvent, emulsifier, dispersant, or any other harmful cleaning substance;
 - [16. Storm water runoff from a roof that is not contaminated by any runoff or discharge from an emissions scrubber or filter or any other source of pollutant;]
 17. Swimming pool water [that has been dechlorinated so that total residual chlorine (TRC) is less than _____ mg/l and] that contains no harmful quantity of [chlorine,] muriatic acid or other chemical used in the treatment or disinfection of the swimming pool water or in pool cleaning.
- C. No affirmative defense shall be available under Subsection B of this section if the discharge or flow in question has been determined by the [City Engineer] to be a source of a pollutant or pollutants to the waters of the United States [or to the MS4], written notice of such determination has been provided to the discharger, and the discharge has occurred more than 15[?] days beyond such notice. The correctness of the [City Engineer's] determination that a discharge is a source of a pollutant or pollutants may be reviewed in any administrative or judicial enforcement proceeding.

III. SPECIFIC PROHIBITIONS AND REQUIREMENTS

- A. The specific prohibitions and requirements in this section are not [necessarily] inclusive of all the discharges prohibited by the general prohibition in Section II.
- B. No person shall introduce or cause to be introduced into the MS4 any discharge that causes or contributes to causing the City to violate a water quality standard, the City's NPDES permit, or any state-issued discharge permit for discharges from its MS4.
- C. No person shall dump, spill, leak, pump, pour, emit, empty, discharge, leach, dispose, or otherwise introduce or cause, allow, or permit to be introduced any of the following substances into the MS4:
 1. Any used motor oil, antifreeze, or any other motor vehicle fluid;
 2. Any industrial waste;

3. Any hazardous waste, including hazardous household waste;
4. Any domestic sewage or septic tank waste, grease trap waste, or grit trap waste;
5. Any garbage, rubbish, or yard waste;
6. Any wastewater from a commercial carwash facility; from any vehicle washing, cleaning, or maintenance at any new or used automobile or other vehicle dealership, rental agency, body shop, repair shop, or maintenance facility; or from any washing, cleaning, or maintenance of any business or commercial or public service vehicle, including a truck, bus, or heavy equipment, by a business or public entity that operates more than 2[?] such vehicles;
7. Any wastewater from the washing, cleaning, de-icing, or other maintenance of aircraft;
8. Any wastewater from a commercial mobile power washer or from the washing or other cleaning of a building exterior that contains any soap, detergent, degreaser, solvent, or any other harmful cleaning substance;
9. Any wastewater from [commercial?] floor, rug, or carpet cleaning;
10. Any wastewater from the washdown or other cleaning of pavement that contains any harmful quantity of soap, detergent, solvent, degreaser, emulsifier, dispersant, or any other harmful cleaning substance; or any wastewater from the washdown or other cleaning of any pavement where any spill, leak, or other release of oil, motor fuel, or other petroleum or hazardous substance has occurred, unless all harmful quantities of such released material have been previously removed;
11. Any effluent from a cooling tower, condenser, compressor, emissions scrubber, emissions filter, or the blowdown from a boiler;
12. Any ready-mixed concrete, mortar, ceramic, or asphalt base material or hydromulch material, or material from the cleaning of [commercial?] vehicles or equipment containing, or used in transporting or applying, such material;
13. Any runoff or washdown water from any animal pen, kennel, or fowl or livestock containment area [containing more than _____ animals];
14. Any filter backwash from a swimming pool, [or] fountain [, or spa];
15. Any swimming pool water containing [total residual chlorine (TRC) of _____ mg/l or more or containing] any harmful quantity of [chlorine,] muriatic acid

or other chemical used in the treatment or disinfection of the swimming pool water or in pool cleaning;

16. Any discharge from water line disinfection by superchlorination or other means if [the total residual chlorine (TRC) is at ___ mg/l or more or if] it contains any harmful quantity of [chlorine or] any other chemical used in line disinfection;
 17. Any fire protection water containing oil or hazardous substances or materials [that the Fire Code in this Code of Ordinances requires to be contained and treated prior to discharge, unless treatment adequate to remove pollutants occurs prior to discharge. (This prohibition does not apply to discharges or flow from fire fighting by the Fire Department.)];
 18. Any water from a water curtain in a spray room used for painting vehicles or equipment;
 19. Any contaminated runoff from a vehicle salvage yard;
 20. Any substance or material that will damage, block, or clog the MS4;
 21. Any release from a petroleum storage tank (PST), or any leachate or runoff from soil contaminated by a leaking PST, or any discharge of pumped, confined, or treated wastewater from the remediation of any such PST release, unless the discharge satisfies all of the following criteria:
 - (a) Compliance with all state and federal standards and requirements;
 - (b) No discharge containing a harmful quantity of any pollutant; [and]
 - (c) No discharge containing more than 50 parts per billion of benzene; 500 parts per billion combined total quantities of benzene, toluene, ethylbenzene, and xylene (BTEX); or 15 mg/l of total petroleum hydrocarbons (TPH).
- D. No person shall introduce or cause to be introduced into the MS4 any harmful quantity of sediment, silt, earth, soil, or other material associated with clearing, grading, excavation or other construction activities [, or associated with landfilling or other placement or disposal of soil, rock, or other earth materials,] in excess of what could be retained on site or captured by employing sediment and erosion control measures to the maximum extent practicable [under prevailing circumstances].
- E. No person shall connect a line conveying sanitary sewage, domestic or industrial, to the MS4, or allow such a connection to continue.

- F. No person shall cause or allow any pavement washwater from a service station to be discharged into the MS4 unless such washwater has passed through a properly functioning and maintained, grease, oil, and sand interceptor before discharge into the MS4.
- G. Used Oil Regulation
1. No person shall:
 - (a) Discharge used oil into the MS4 or a sewer, drainage system, septic tank, surface water, groundwater, or water course;
 - (b) Knowingly mix or commingle used oil with solid waste that is to be disposed of in a landfill or knowingly directly dispose of used oil on land or in a landfill;
 - (c) Apply used oil to a road or land for dust suppression, weed abatement, or other similar use that introduces used oil into the environment.
- H. [A particular city may want to include, or retain from existing ordinances, certain “nuisance” provisions requiring removal of trash and debris from property, prohibiting stagnant water from being allowed to stand on property, and prohibiting storage of toxic or hazardous substances on property so as to allow exposure to precipitation and storm water runoff, etc.]
- I. [A particular city may want to include any provisions deemed necessary to protect special local features critical to control of storm water runoff -- for example, wetlands, swales, or ponds.]

IV. COMPLIANCE MONITORING

A. Right of Entry: Inspection and Sampling

The [City Engineer] shall have the right to enter the premises of any person discharging storm water to the municipal separate storm sewer system (MS4 or to waters of the United States to determine if the discharger is complying with all requirements of this Ordinance[, and with any state or federal discharge permit, limitation, or requirement]. Dischargers shall allow the [City Engineer] ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and for the performance of any additional duties. Dischargers shall make available to the [City Engineer], upon request, any SWPPPs, modifications thereto, self-inspection reports, monitoring records, compliance evaluations, Notices of intent, and any other records, reports, and other documents related to compliance with this Ordinance and with any state or federal discharge permit.

1. Where a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the [City Engineer] will be permitted to enter without delay for the purposes of performing his/her responsibilities.
2. The [City Engineer] shall have the right to set up on the discharger's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the discharger's operations.
3. The [City Engineer] may require any discharger to the MS4 or waters of the United States to conduct specified sampling, testing, analysis, and other monitoring of its storm water discharges, and may specify the frequency and parameters of any such required monitoring.
4. The [City Engineer] may require the discharger to install monitoring equipment as necessary [at the discharger's expense]. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.
5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the discharger at the written or verbal request of the [City Engineer] and shall not be replaced. The costs of clearing such access shall be borne by the discharger.
6. Unreasonable delays in allowing the [City Engineer] access to the discharger's premises shall be a violation of this Ordinance.

B. Search Warrants

If the [City Engineer] has been refused access to any part of the premises from which storm water is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this Ordinance [or any state or federal discharge permit, limitation, or requirement], or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City designed to verify compliance with this Ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the [City Engineer] may seek issuance of a search warrant from any court of competent jurisdiction.

V. ADMINISTRATIVE ENFORCEMENT REMEDIES

A. Warning Notice

When the [City Engineer] finds that any person has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, the [City Engineer] may serve upon that person a written Warning Notice, specifying the particular violation believed to have occurred and requesting the discharger to immediately investigate the matter and to seek a resolution whereby any offending discharge will cease. Investigation and/or resolution of the matter in response to the Warning Notice in no way relieves the alleged violator of liability for any violations occurring before or after receipt of the Warning Notice. Nothing in this subsection shall limit the authority of the [City Engineer] to take any action, including emergency action or any other enforcement action, without first issuing a Warning Notice.

B. Notification of Violation

When the [City Engineer] finds that any person has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, the [City Engineer] may serve upon that person a written Notice of Violation. Within ten (10) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention of reoccurrence thereof, to include specific required actions, shall be submitted by the alleged violator to the [City Engineer]. If the alleged violator denies that any violation occurred and/or contends that no corrective action is necessary, an explanation of the basis of any such denial or contention shall be submitted to the [City Engineer] within ten (10) days of receipt of the notice. Submission of an explanation and/or plan in no way relieves the alleged violator of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this section shall limit the authority of the [City Engineer] to take any action, including emergency action or any other enforcement action, without first issuing a Notice of Violation.

C. Consent Orders

The [City Engineer] may enter into Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any person responsible for noncompliance with any provision in this Ordinance or any order issued hereunder. Such documents may include specific action to be taken by the person to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to Subsections V.E. and V.F. and V.G. of this Ordinance and shall be judicially enforceable.

D. Show Cause Hearing

The [City Engineer] may order any person who has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, to appear before the [City Engineer] and show cause why a proposed enforcement action should not be taken. Notice shall be served on the alleged violator specifying the time and place for the hearing, the proposed enforcement action, the reasons for such action, and a request that the alleged violator show cause why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any authorized representative of the alleged violator. The hearing shall be conducted pursuant to the rights and procedures specified in paragraph VI.A.7 of this Ordinance. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the alleged violator.

E. Compliance Orders

When the [City Engineer] finds that any person has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, the [City Engineer] may issue an order to the violator directing that the violator come into compliance within a specified time limit. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring, and management practices designed to minimize the amount of pollutants discharged to the MS4 and waters of the United States. A compliance order may not extend the deadline for compliance established by a state or federal standard or requirement, nor does a compliance order relieve the person of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the violator.

F. Remediation, Abatement, and Restoration Orders

When the [City Engineer] finds that a person has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, and that such violation has adversely affected the MS4, the waters of the United States or any other aspect of the environment, the [City Engineer] may issue an order to the violator directing him/her to undertake and implement any appropriate action to remediate and/or abate any adverse effects of the violation upon the MS4, the waters of the United States, or any other aspect of the environment, and/or to restore any part of the MS4, the waters of the United States, or any other aspect of the environment that has been harmed. Such remedial, abatement, and restoration action may include, but not be limited to: monitoring, assessment, and evaluation of the adverse effects and determination of the appropriate remedial, abatement, and/or restoration action; confinement, removal, cleanup, treatment, and disposal of any discharged or released pollution or contamination; prevention, minimization, and/or mitigation of any damage to the public health, welfare, or the environment that may result from the violation; restoration or replacement of City property or natural resources damaged by the violation. The order may direct that the remediation, abatement, and/or restoration be accomplished on a specified compliance schedule and/or be completed within a specified period of time. An order issued under this Subsection does not relieve the violator of liability for any violation, including any continuing violation. Issuance of an order under this Subsection shall not be a bar against, or a prerequisite for, taking any other action against any responsible party.

G. Emergency Cease and Desist Orders

When the [City Engineer] finds that any person has violated, or continues to violate, any provision of this Ordinance, or any order issued hereunder, or that the person's past violations are likely to recur, and that the person's violation(s) have caused or contributed to an actual or threatened discharge to the MS4 or waters of the United States which reasonably appears to present an imminent or substantial endangerment to the health or welfare of persons or to the environment, the [City Engineer] may issue an order to the violator directing it immediately to cease and desist all such violations and directing the violator to:

1. Immediately comply with all Ordinance requirements; and
2. Take such appropriate preventive action as may be needed to properly address a continuing or threatened violation, including immediately halting operations and/or terminating the discharge.

Any person notified of an emergency order directed to it under this Subsection shall immediately comply and stop or eliminate its endangering discharge. In the event of a discharger's failure to immediately comply voluntarily with the emergency order, the [City Engineer] may take such steps as deemed necessary to prevent or minimize harm to the MS4 or waters of the United States, and/or endangerment to persons or

to the environment [, including immediate termination of a facility’s water supply, sewer connection, or other municipal utility services]. The [City Engineer] may allow the person to recommence its discharge when it has demonstrated to the satisfaction of the [City Engineer] that the period of endangerment has passed, unless further termination proceedings are initiated against the discharger under this Ordinance. A person that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful discharge and the measures taken to prevent any future occurrence, to the [City Engineer] within ____ days of receipt of the emergency order. Issuance of an emergency cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the violator.

H. “Red Tags”

Whenever the [City Engineer] finds that any operator of a construction site has violated, or continues to violate, any provision of Section V of this Ordinance, or any order issued thereunder, the [City Engineer] may order that a “Red Tag” be issued to the operator, posted at the construction site, and distributed to all City departments and divisions whose decisions affect any activity at the site. Unless express written exception is made by the [City Engineer], the “Red Tag” shall prohibit any further construction activity at the site and shall bar any further inspection or approval by the City associated with a building permit, grading permit, [subdivision plat approval,] site development plan approval, or any other City approval necessary to commence or continue construction or to assume occupancy at the site. Issuance of a “Red Tag” order shall not be a bar against, or a prerequisite for, taking any other action against the violator.

VI. RIGHT TO RECONSIDERATION, HEARING, AND APPEAL

A. Reconsideration and Hearing

1. Any person subject to a Compliance Order under Subsection V.E, a Remediation, Abatement, or Restoration Order under Subsection V.F, an Emergency Cease and Desist Order under Subsection V.G, or a Red Tag Order under Subsection V.H of this Ordinance may petition the [City Engineer] to reconsider the basis for his/her order within _____ (__) days of the affected person’s notice of issuance of such an order.
2. Failure to submit a timely written petition for reconsideration shall be deemed to be a waiver of any further right to administrative reconsideration or review of the order.
3. In its petition, the petitioning party must indicate the provisions of the order objected to, the reasons for the objection(s), any facts that are contested, the evidence that supports the petitioner’s view of the facts, any alternative terms

of an order that the petitioner would accept, and whether the petitioning party requests a hearing on its petition.

4. The effect of any Compliance Order under Subsection V.E, Remediation, Abatement, or Restoration Order under Subsection V.F, and any Red Tag Order under Subsection V.H shall be stayed pending the [City Engineer's] reconsideration of the petition, and any hearing thereon, unless the [City Engineer] expressly makes a written determination to the contrary. The effectiveness of any Emergency Cease and Desist Order under Subsection V.G shall not be stayed pending the [City Engineer's] reconsideration, or any hearing thereon, unless the City Engineer expressly and in writing stays his/her emergency order.
5. Within _____ (___) days of the submittal of a petition for reconsideration, the [City Engineer] shall either (1) grant the petition and withdraw or modify the order accordingly; (2) deny the petition, without hearing if no material issue of fact is raised; or (3) if a hearing has been requested and a material issue of fact has been raised, set a hearing on the petition.
6. Written notice of any hearing set by the [City Engineer] pursuant to paragraph VI.A.5 above shall be served on the petitioning party personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any authorized representative of the petitioning party.
7. The [City Engineer] may himself/herself conduct the hearing and take evidence, or he/she may designate any employee of the City or any specially-designated attorney or engineer to:
 - (a) issue in the name of the City notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing;
 - (b) take evidence;
 - (c) transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the [City Engineer] for action thereon.

At any hearing held pursuant to this Subsection, testimony taken shall be under oath and recorded. Any party is entitled to present his/her case or defense by oral or documentary evidence and to conduct such cross-examination as may be required for a full and true disclosure of the facts. A transcript will be made available to any party to the hearing upon payment of the usual charges thereof.

8. After the [City Engineer] has reviewed the evidence, he/she shall either (1) grant the petition; (2) deny the petition; or (3) grant the petition in part and deny it in part. The [City Engineer] may modify his/her order as is appropriate based upon the evidence and arguments presented at the hearing and his/her action on the petition. Further orders and directives as are necessary and appropriate may be issued.

B. Appeal

1. Any person whose petition for reconsideration by the [City Engineer] has not been granted in its entirety and who remains adversely affected by the [City Engineer's] order, or who is subject to an order of the [City Engineer] issued following a Show Cause Hearing under Subsection V.D, may appeal the action of the [City Engineer] to the City Council by filing a written appeal with the City Council within _____ (__) days of the person's notice of the [City Engineer's] adverse action on the petition for reconsideration, or within _____ (__) days of the person's notice of the issuance of the order following the Show Cause Hearing, as the case may be.
2. Failure to submit a timely written appeal to the City Council shall be deemed to be a waiver of further administrative review.
3. In its written appeal to the City Council, the appealing party shall indicate the particular provisions of the order objected to, the particular determinations of the [City Engineer] that are contested, the reasons that the [City Engineer's] order and/or determinations are contested, and any alternative order that the appealing party would accept.
4. The effect of the [City Engineer's] order, as issued or modified, shall not be stayed pending the appeal to the City Council, unless the City Council expressly so states.
5. Within _____ (__) days of the submittal of a written appeal to the City Council, the City Council shall hear and consider the appeal in open meeting. The appellant shall be notified at least _____ (__) days in advance of the date and time of the City Council meeting at which the appeal will be heard and considered.
6. The appellant shall have the right to public appearance before the City Council to present oral and written statements in support of his/her appeal. [If the City Council wishes to consider testimony of witnesses or other evidence beyond that in the record of any hearing before the [City Engineer] the City Council may remand the matter to the [City Engineer] for the taking of additional testimony or other evidence.]

7. Upon consideration of any written and oral statements made to the City Council, as well as the record made before the [City Engineer], the City Council shall act on the appeal by affirming, vacating, or modifying the order of the [City Engineer], and/or by remanding the matter to the [City Engineer] for further action.
8. Following final action by the City Council on the appeal, any adversely affected party may challenge such action by the City Council in an appropriate court of competent jurisdiction.

VII. JUDICIAL ENFORCEMENT REMEDIES

A. Civil Remedies

1. Whenever it appears that a person has violated, or continues to violate, any provision of this Ordinance that relates to:
 - (a) the preservation of public safety, relating to the materials or methods used in construction of any structure or improvement of real property;
 - (b) the preservation of public health or to the fire safety of a building or other structure or improvement;
 - (c) the establishment of criteria for land subdivision or construction of buildings, including street design;
 - (d) dangerously damaged or deteriorated structures or improvements;
 - (e) conditions caused by accumulations of refuse, vegetation, or other matter that creates breeding and living places for insects and rodents; or
 - (f) point source effluent limitations or the discharge of a pollutant, other than from a non-point source, into the MS4.

-- The City may invoke Sections 54.011 - 54.017 of the Texas Local Government Code and petition the State district court or the county court at law of _____ County, through the City Attorney, for either the injunctive relief specified in paragraph VII.A.2 or the civil penalties specified in paragraph VII.A.3 below, or both the specified injunctive relief and civil penalties.

2. Pursuant to Section 54.016 of the Texas Local Government Code, the City may obtain against the owner or the operator of a facility a temporary or permanent injunction, as appropriate, that:
 - (a) prohibits any conduct that violates any provision of this Ordinance that relates to any matter specified in subparagraphs VII.A.1.(a)-(f) above; or

(b) compels the specific performance of any action that is necessary for compliance with any provision of this Ordinance that relates to any matter specified in subparagraphs VII.A.1.(a)-(f) above.

3. Pursuant to Section 54.017 of the Texas Local Government Code, the City may recover a civil penalty of not more than \$1,000 per day for each violation of any provision of this Ordinance that relates to any matter specified in subparagraph VII.A.1.(a)-(e) above, and a civil penalty of not more than \$5,000 per day for each violation of any provision of this Ordinance that relates to any matter specified in subparagraph VII.A.1.(f) above, if the City proves that:

(a) the defendant was actually notified of the provisions of the Ordinance; and

(b) after the defendant received notice of the Ordinance provisions, the defendant committed acts in violation of the Ordinance or failed to take action necessary for compliance with the Ordinance.

B. Criminal Penalties

1. Any person who has violated any provision of this Ordinance, or any order issued hereunder, shall be strictly liable for such violation [regardless of the presence or absence of a culpable mental state] and shall, upon conviction, be subject to a fine of not more than \$2000 per violation, per day [, or any greater fine authorized by State statute].

2. Any person who has knowingly made any false statement, representation, or certification in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this Ordinance, or any order issued hereunder, or who has falsified, tampered with, or knowingly rendered inaccurate any monitoring device or method required under this Ordinance shall, upon conviction, be subject to a fine of not more than \$2000 per violation, per day [, or any greater fine authorized by State statute].

3. In determining the amount of any fine imposed hereunder, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the violation, corrective actions by the violator, the compliance history of the violator, the knowledge, intent, negligence, or other state of mind of the violator, and any other factor as justice requires.

C. Civil Suit Under the Texas Water Code

Whenever it appears that a violation or threat of violation of any provision of Section 26.121 of the Texas Water Code, or any rule, permit, or order of the Texas Natural Resource Conservation Commission, has occurred or is occurring within the jurisdiction of the City of _____, exclusive of its extraterritorial jurisdiction, the City, in the same manner as the Texas Natural Resource Conservation Commission, may have a suit instituted in a state district court through its City Attorney for the injunctive relief or civil penalties or both authorized in Subsection (a) of Section 26.123 of the Texas Water Code, against the person who committed or is committing or threatening to commit the violation. This power is exercised pursuant to Section 26.124 of the Texas Water Code. In any suit brought by the City under this Subsection VII.C, the Texas Natural Resource Conservation Commission is a necessary and indispensable party.

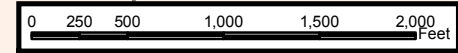
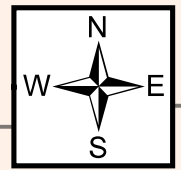
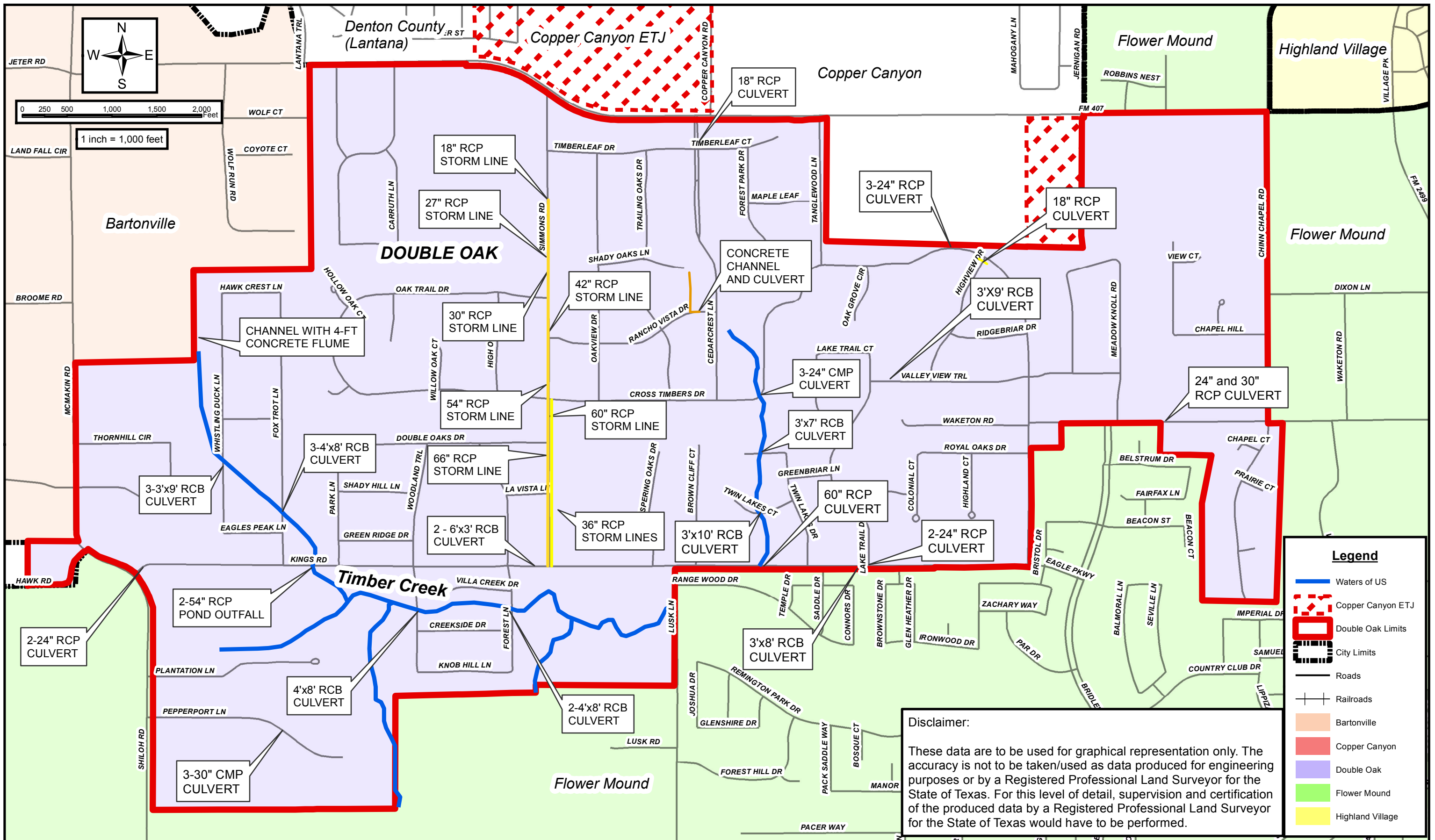
D. Remedies Nonexclusive

The remedies provided for in this Ordinance are not exclusive of any other remedies that the City may have under state or federal law or other City ordinances. The City may take any, all, or any combination of these actions against a violator. The City is empowered to take more than one enforcement action against any violator. These actions may be taken concurrently.

Procedure for Conducting Dry Weather Inspections

1. All dry weather inspections shall take place in the month of July unless there have been large number of unseasonal rain events making the dry inspections impossible to perform. In the case of unseasonal rain events the dry weather inspections shall be performed in August.
2. The Director of Public Works and the Floodplain Manager, Town Engineer, or other town representative designated by the Mayor shall both be present during the dry weather inspections.
3. The most current map of all storm water outfalls shall be used as a checklist for inspection day and must be signed by both inspectors once the dry weather inspections have been completed.
4. All inspections should take place on the same day when possible.

Prepared by: Charles Wright



1 inch = 1,000 feet

Legend

- Waters of US
- Copper Canyon ETJ
- Double Oak Limits
- City Limits
- Roads
- Railroads
- Bartonville
- Copper Canyon
- Double Oak
- Flower Mound
- Highland Village

Disclaimer:
 These data are to be used for graphical representation only. The accuracy is not to be taken/used as data produced for engineering purposes or by a Registered Professional Land Surveyor for the State of Texas. For this level of detail, supervision and certification of the produced data by a Registered Professional Land Surveyor for the State of Texas would have to be performed.



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 Flower Mound, Texas 75028
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TOWN OF DOUBLE OAK WATERS OF US
 Year 3 Annual Report



320 Waketon Road
 Double Oak, TX 75077
 Phone: (972) 539-9464

ARTICLE II. EROSION CONTROL*

Sec. 42-31. Policy.

- (a) This article establishes rules and regulations governing the control of erosion and sedimentation within the jurisdiction of the city. The provisions of this article shall apply to all new construction, existing buildings and structures, and all real property, whether vacant or improved.
- (b) Private property owners, developers or builders shall be accountable for any erosion of their property or any construction site which results in measurable accumulation of sedimentation in dedicated streets and ditches and in adjacent and downstream properties. No person shall cause, suffer or permit an accumulation of sedimentation resulting from erosion on property owned, occupied or controlled by that person deeper than one inch in any street, alley, culvert, bar ditch, drainageway, or other private property. Any person in violation of this article shall be punished as provided in this article.
- (c) All persons who own, occupy or are in control of real property within the city limits shall comply with the following standards:
- (1) Maximum use shall be made of vegetation to minimize soil loss.
 - (2) Natural vegetation should be retained wherever possible.
 - (3) Where inadequate natural vegetation exists, or where it becomes necessary to remove existing natural vegetation, temporary controls must be installed promptly to minimize soil loss and ensure that erosion and sedimentation does not occur.
 - (4) An erosion control plan must be submitted to the city for approval by the building inspector or city engineer at the time of application and prior to actual construction.

(5) Wastes or disposal areas and construction should be located and constructed in a manner that will minimize the amount of sediment entering streams and drainage ditches.

(6) When work areas or material sources are located in or adjacent to live streams, such area shall be separated from the stream by a dike or other barrier to keep sediment from entering a flowing stream. Care shall be taken during the construction and removal of such barriers to minimize the sediment transport into a stream.

(7) Should preventive measures fail to function effectively, the applicant shall act immediately to bring the erosion and/or siltation under control by whatever additional means are necessary.

(8) Rainfall and stormwater runoff shall be diverted away from construction areas as much as possible without causing damage or increase in runoff to downstream properties.

(9) Developers, builders or owners of property shall permanently stabilize all disturbed areas prior to final acceptance of the subdivision, project and/or building or structure. Stabilization shall be accomplished through the use of perennial vegetative cover or other permanent means, such as channel lining, retaining wall, etc.

(Ordinance 99-04, sec. 1(15.26.010), adopted 1/14/99)

Sec. 42-32. Permanent and temporary erosion controls.

(a) Permanent erosion controls shall be installed at or near the end of a construction project when no further disturbance of the area will occur as a result of construction activity in order to permanently minimize soil loss by such methods as restoring ground cover, building retaining walls for steep slopes, or reducing wave or water action by lining channels or shorelines with gabions, jute mats, vegetation or similar materials.

(b) Temporary erosion control methods shall be used to abate sediment runoff from construction sites and shall be used and maintained throughout the duration of construction activity.

(Ordinance 99-04, sec. 1(15.26.020), adopted 1/14/99)

Sec. 42-33. Erosion control barriers.

Erosion control measures shall be used in order to trap sediment and prevent high runoff velocities which cause erosion. Acceptable erosion control methods classified as acceptable barriers include straw bale sediment barriers, sandbag sediment barriers, check dam and sediment traps. (Ordinance 99-04, sec. 1(15.26.030), adopted 1/14/99)

Sec. 42-34. Erosion control filters.

Filtering methods may be used in place of barriers which allow runoff to pass through but retain sediment by filtration. Acceptable types of filters are filter berms, filter fences, filter inlets and vegetation filter strips. (Ordinance 99-04, sec. 1(15.26.040), adopted 1/14/99)

Sec. 42-35. Routing devices.

Subject to approval by the city's building inspector or city engineer, routing devices may be used to eliminate erosion problems by conveying water down steep slopes and other critical areas and across highly erodible soils where the filtration or capture of solids already moving in the water is not necessary. If approved, some methods classified under erosion control barriers may be used as routing devices to protect erodible areas such as sandbag sediment barriers and straw bale sediment barriers. (Ordinance 99-04, sec. 1(15.26.050), adopted 1/14/99)

Sec. 42-36. Performance.

(a) No person shall cause, suffer, allow or permit an excessive accumulation of silt, sediment or soil in any stream or pond or on any other property, whether private or public, which originates on property owned or controlled by that person where such accumulation is caused by erosion. The foregoing prohibition applies in areas or properties where construction activity is underway, in areas in which buildings and structures exist, and to vacant properties.

(b) All construction sites where new construction or renovation is being or is to be conducted, whether residential or nonresidential, must have temporary erosion control measures in place during construction.

(c) All persons who own, occupy or are in control of real property within the city shall keep and maintain all culverts, bar ditches and drainageways on the property free and clear of accumulations of trash, debris, sediments and other matter which may impede the flow of water through the culverts, bar ditches and drainageways.

(Ordinance 99-04, sec. 1(15.26.060), adopted 1/14/99)

Sec. 42-37. General provisions; intent.

During the land development process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat. Eroded soil also necessitates repair of sewers and ditches and the dredging of waterways. During the land development process, clearing and grading during construction cause the loss of native vegetation necessary for a healthy habitat. This article is intended to safeguard persons, protect property, and prevent damage to the environment while promoting the public welfare by regulating and controlling activity that disturbs or breaks the topsoil or results in the movement of earth on land. (Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-38. Definitions.

The following words, when used in this article, shall have the meanings respectively ascribed to them in this section, unless such construction would be inconsistent with the manifest intent of the terms of this article or where the context of this article clearly indicates otherwise.

City. The City of Lake Dallas, Texas, and, when in context, shall refer to the city manager or his delegate.

Clearing. Any activity that removes the vegetative surface cover.

Development or development activity. Any manmade change to an improved or unimproved site, including, but not limited to, construction of or adding buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, grading or clearing.

Drainage way. Any channel that conveys surface runoff throughout the site.

Erosion control. A measure that prevents erosion.

Erosion and sediment control plan. A set of plans indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction activity.

Grading. Any stripping, cutting, filling, stockpiling or combination thereof which modifies the existing land surface contour.

Land-disturbing activity. Any activity which may result in soil erosion from water or wind and the movement of sediments into public waters or onto public lands or adjacent property, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land. The term does not include home gardening activity and individual home landscaping repairs, fences, and other related activities which result in minor soil erosion.

Sediment control. Measures that prevent eroded sediment from leaving the site.

Site. A parcel of land or a contiguous combination thereof.

Site development permit. A permit for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading on a site.

Watercourse. Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water.

Waterway. A channel that directs surface runoff to a watercourse or to the public storm drain.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-39. Permit required.

(a) A person commits an offense if the person performs or causes to be performed any land-disturbing activity without an approved site development permit from the city.

(b) It is an affirmative defense to prosecution of a violation of subsection (a) that the land-disturbing activity consists of one of the following activities:

(1) An emergency activity that is immediately necessary for the protection of life, property, or natural resources;

(2) A nursery and/or agricultural operation existing as of the date of adoption of this section and conducted as a permitted use on the site; or

(3) Gardening or yard work for a residential dwelling disturbing less than 7,500 square feet of vegetation.

(c) Each application shall be submitted to the city on a form maintained by the city and shall contain the name(s) and address(es), email addresses and phone numbers of the owner, and if different, the developer of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm.

(d) A person shall submit with their application a stormwater pollution prevention plan (SWPPP) for the property for which the land-disturbing activity is proposed. Additionally, if applicable, off-site borrow areas, spoil areas and construction staging areas shall be considered as part of the development site and shall be included in the SWPPP.

(e) Each application shall include a signed statement by the applicant affirming that any land clearing, grading, construction, or development involving the movement of earth shall be conducted in accordance with the SWPPP approved with the site development permit.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-40. Review and approval.

- (a) The city will review each application for a site development permit to determine its conformance with the provisions of this article.

- (b) After receiving an application, the city shall review the application and:
 - (1) Approve the permit application;

 - (2) Approve with permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this article, and issue the permit subject to these conditions; or

 - (3) Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-41. Stormwater pollution prevention plan.

- (a) The stormwater pollution prevention plan (SWPPP) shall include the following:
 - (1) Site and activity description including site plan at a scale of no smaller than 1" = 40';

 - (2) Project and SWPPP contact(s) information;

 - (3) A description of all potential pollutant sources that could come into contact with stormwater leaving the site;

(4) Description of controls and best management practices to reduce pollutants during construction;
and

(5) Maintenance, inspection and record procedures.

(b) The city may approve modifications to the approved plan administratively.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-42. Design and construction requirements.

(a) A person who engages in land-disturbing activity shall comply with the SWPPP approved by the city. The person who owns the land for which the SWPPP is submitted shall install or cause to be installed and maintained the erosion control devices in accordance with the plan and this article.

(b) A person who engages in land-disturbing activity shall comply with the grading and erosion control practices, sediment control practices, and waterway crossings contained in the standards set forth in the building codes adopted by and in effect in the city.

(c) The SWPPP shall provide for all practices and erosion control devices that prevent runoff of soil from the site onto public streets, drainage easements, drainage facilities, storm drains, alleys, sidewalks or other property.

(d) The owner of the site, and if applicable, the site developer, shall implement and maintain the erosion control measures shown on its approved SWPPP in order to minimize the erosion and the transport of silt, earth, topsoil, etc., by water runoff or construction activities, beyond the limits of the site prior to beginning any land-disturbing activity.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-43. Inspection.

(a) The city shall make regular inspections of the site for which the permit was granted to inspect all control measures outlined on the approved SWPPP(s). The purpose of such inspections will be to determine the overall effectiveness of the SWPPP and the need for additional control measures or maintenance to the control measures. The city shall either approve that portion of the work completed or notify the permit holder wherein the work fails to comply with the approved SWPPP.

(b) Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the city shall be maintained at the site during the progress of work.

(c) The site development permit shall, whether or not expressly stated therein, authorize the city to enter the property of the applicant as deemed necessary to make regular inspections to ensure the effectiveness of the erosion control measures.

(d) The city shall have a right of entry onto property to conduct such inspections as may be necessary to confirm that proper and effective erosion control measures have been constructed, implemented and installed. It shall be a violation of this article for any person to refuse such entry or to fail to call for such inspection in a timely manner.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-44. Stop work order; suspension; appeal.

(a) In the event that a person holding a site development permit violates the terms of the site development permit or engages in development activity in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or the site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the city may issue a stop work order and suspend the site development permit. Any suspension shall state the reasons for which the permit is being suspended and shall advise the permit holder of their right to appeal.

(b) Any person whose site development permit has been suspended may, at any time, make written application for a reinspection for the purpose of reinstating the permit. If upon reinspection, the facility is found to be in compliance, then the permit shall be reinstated.

(c) A permit holder may appeal the stop work order or suspension to the city manager by submitting a request in writing to the city secretary, who shall set a time for the appellant to have a hearing before the city manager. The appeal shall state the grounds for the appeal and notice of the meeting shall be sent to the permit holder at the address shown on the application. At the hearing, the permit holder may present any evidence and the city manager shall determine, based on preponderance of the evidence, whether the suspension shall be sustained, modified or rescinded. The decision of the city manager shall be final and binding.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-45. Penalty.

(a) A person commits an offense if the person conducts a land-disturbing activity and;

(1) Fails to install erosion control devices or to maintain erosion control devices throughout the duration of land-disturbing activities, in compliance with the approved SWPPP for the location where the violation occurred;

(2) Fails to remove off-site sedimentation that is a direct result of land-disturbing activities where such off-site sedimentation results from the failure to implement or maintain erosion control devices as specified in an approved SWPPP for the location where the violation occurred;

(3) Fails to repair damage to existing erosion control devices, including replacement of existing grass or sod; or

(4) Constructs, enlarges, alters, repairs, or maintains any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this article.

(b) Any person in violation of any of the provisions of this article shall be deemed guilty of a misdemeanor and upon conviction shall be fined in a sum of not less than \$1.00 nor more than \$2,000.00. Each separate offense may be punished separately, and each day during which such violation

occurs or continues shall be deemed to constitute a separate offense. For the purposes of criminal enforcement, it shall not be a defense that the city failed to issue any notice described in this article. It is the intent of the city that a violation of any provision of this article shall be a strict liability offense; no allegation or proof of intent or of a knowing or intentional violation shall be necessary in any prosecution hereunder.

(c) Any person convicted of violating any of the provisions of this article shall be required to bear the expense of restoration of any property damaged as a proximate result of the violation. The city shall send the person an invoice for the costs incurred to repair or remediate the property and the person shall pay the invoice within 30 days of receipt of the invoice.

(d) Nothing contained herein shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation, including seeking injunctive relief, and the remedies provided for herein and in other codes or laws are cumulative.

(e) No building permit or certificate of occupancy or other use permit may be issued for any construction, reconstruction or development upon any land where such construction, reconstruction or development is not in conformity with the requirements of this article. This shall include payment for the actual costs incurred by the city to restore or remediate any damages to property resulting from a violation of this article.

(Ordinance 13-10, sec. 2, adopted 10/24/13)

Sec. 42-46. Miscellaneous provisions.

The erosion protection measures required by this article are considered reasonable for regulatory purposes and are based on scientific and engineering considerations. This article does not imply that erosion controls will survive inundation by runoff from storms greater than the design flood for erosion controls. This article shall not create liability on the part of the city, any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made hereunder. (Ordinance 13-10, sec. 2, adopted 10/24/13)

Secs. 42-47–42-70. Reserved.


**THE
CROSS TIMBERS GAZETTE**

Serving Flower Mound, Highland Village, Lantana, Argyle, Bartonville, Canyon Falls, Copper Canyon, Corral City, Double Oak, Harvest and Robson Ranch.


**THE
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News From Double Oak Town Hall – April 2016



Jim Bridges, Agent Monday-Friday 9:00am-5:00pm
2659 FM 407 E Ste 105 Saturdays 9:00am - Noon
Bartonville, TX 76226 Or by appointment

Contact Me >

Talk to us 24/7/365.

Another reason people switch to State Farm.

State Farm

(<http://jimbridgesinsurance.com/>)



(<http://www.crosstimbersgazette.com/crosstimbersgazette/wp-content/uploads/2015/10/double-oak-mayor-mike-donnelly.jpg>)

Double Oak Mayor Mike Donnelly

May 7, 2016 Town of Double Oak One Percent (1%) Sales Tax Election

At the regular council meeting on Monday, January 18, the council approved an ordinance calling for a special election for the adoption of an additional local sales and use tax at the rate of one percent (1%) to be held on May 7, 2016.

The Town of Double Oak currently imposes sales taxes at the combined rate of seven and one-fourth percent (7.25%), of which only one percent (1%) is payable to the Town. Texas law authorizes the Town, upon majority vote of its citizens and passage to adopt up to one additional percent in sales tax, which may be a combined sales tax to fund proper town operations.

The combined sales tax rate imposed in the Town, if approved, shall be eight and one quarter percent (8.25%), of which two percent would be retained by or paid to the Town. This would match many of our neighboring communities and the addition of sales tax revenue would assist the town in keeping one of the overall lowest property tax rates in Denton County. The revenue will go to the town's general sales tax account and help fund public safety (EMS, Fire, Police) and street maintenance.

The ballot will read: *Town of Double Oak Sales and Use Tax Proposition – The adoption of a local sales and use tax in the Town of Double Oak at the rate of one percent (1%). (For/Against)*

May 2016 Double Oak Town Council Municipal Election (3 Seats)

This year's town council municipal election was uncontested, therefore, it has been cancelled. Congratulations to incumbents Anita Nelson and Ted Gruenloh for your continued service. Welcome and congratulations to Andrew Wills on joining town council. Double Oak recognizes and thanks John Dondrea for his years of dedicated service. Town staff will coordinate a date for the swearing-in and a reception.

Discussion on an ordinance prohibiting the use of a hand held electronic device while operating a motor vehicle

Councilman Ted Gruenloh has requested that the town consider such an ordinance, meaning it would be illegal to hold and use a cell phone or any electronic device while driving. Councilman Gruenloh is spending time researching other municipalities that have either adopted such an ordinance or are in the process of discussing it. He and the council will like to hear residents' thoughts on this matter. Council meetings are normally the 1st and 3rd Monday of each month. Feel free to send an email to Town Secretary Charlotte A at town_secretary@double-oak.com and she will make sure your email reaches council.

FM 407 Business Park Retail Center plans submitted for consideration

The landowner/developer of the property next to Double Oak Vet on FM 407 has proposed developing an 18,000 square foot retail center. The Planning and Zoning Commission voted 7 – 0 on February 25th, 2016 to recommend approval to the town council. The town council held its public hearing on March 7th and took up discussion on the item at its March 21 meeting. After a lot of input and discussion, the applicant requested that the agenda item be tabled and council voted to table to a future meeting.

Spring Newsletter – Spring Cleaning Tips

Spring weather can make a mess of your yard and our local waterways. Here are a few tips for getting your landscape back in shape and keeping local lakes, streams and rivers clean:

Avoid putting any permanent structures in flood prone areas of your yard and try to keep those areas clear during the spring. Spring storms can create standing water and voluntary streams that wash loose dirt and debris out of your yard and into creeks and roadside ditches where they are carried downstream to local waterways.

Keep grass clippings, leaves and debris out of local streams and wetlands. Compost your yard waste or dispose of it in your street-side pick-up. Yard waste that ends up in wetlands or streams contributes to algal growth in the summer, making the water green and smelly.

Stabilize your soil and increase infiltration by planting deep-rooted native plants or trees. The roots of turf grass extend only two to three inches into the soil, giving it little ability to hang on when the water flows. Native flowers and grasses, on the other hand, can have root systems four to twelve feet deep! These deep roots anchor the plants and keep soil from washing away. They also increase the amount of water the soil can absorb, meaning that more water sinks in to recharge groundwater aquifers and less ends up in the storm drain.

If you live along a stream or wetland, it is important to maintain a healthy un-mowed buffer along your shoreline. A shoreline or stream bank planted in trees and native plants will hold the soil steady when it rains. Buffers also catch and filter many of the pollutants found in storm water runoff.

In Memory of Municipal Court Judge Angie Warner

The Hon. Judge Angie Warner passed away on March 9, 2016. Angie had a long history of public service beginning as a court secretary and eventually serving as a city manager for a Dallas suburb. She served as the municipal judge for Double Oak and many other towns throughout Denton County over her career. She always spoke highly and lovingly of her family and especially her grandkids. Judge Warner served with Honor and with Respect of the Law. God Bless Judge Warner and her family.

Double Oak appoints Municipal Court Judges

The Double Oak Municipal Court announces the following appointments and welcomes Presiding Judge Hon. Greg Bertrand and alternate Judges Hon. Robin Ramsey and Hon. Gilland Chenault to the Double Oak Municipal Court bench.

Waste Management discusses recycle mishandling with cities

Waste Management officials, at this time, continue to have discussions with Double Oak and other cities that had residents' recycling mishandled. Discussions center on an amount of credit/refund owed to customers and weekly route service issues. As of this writing, the weekly route service issues have shown improvement under the new local Waste Management team. They have route supervisors spot checking areas and also noting if customer carts are at the street when trucks come by. To ensure your carts and bags are serviced on Fridays, residents need to have everything street side at 7 a.m. Friday mornings.

Double Oak Town Secretary Charlotte Allen Celebrates 14 Years

Our charming and kind Town Secretary Charlotte Allen will celebrate her 14 year employment anniversary on April 8th. Everyone loves her and we all appreciate her. She is very professional when it comes to her work and ensuring town records are kept and secure. She also has a softer side that loves to talk and she has been the Town Ambassador during her town career. If you are by town hall, stop in and say hi and wish her congratulations. Thank you and congratulations Charlotte. We all love you dearly.



(<http://tcelectrical.com/>)



(<https://www.pointbank.com/loans/>)

Stormwater Education

Are We Keeping the Water Clean?



Presented by James Gaertner, P.E., C.F.M.

Grass Clippings (What Not to Do)



Grass Clippings should not be blown into the street since it will be drain into the storm system and cause the following issues:

1. Clogs storm lines and inlets

Grass Clippings (What Not to Do)



Grass Clippings should not be blown into the street since it will be drain into the storm system and cause the following issues:

1. Clogs storm lines and inlets

Grass Clippings (What Not to Do)



Grass Clippings should not be blown into the street since it will be drain into the storm system and cause the following issues:

1. Clogs storm lines and inlets
2. Increase the nutrients in the creeks and lakes water
3. Nutrients will increase algae in lakes and kill aquatic life



Inlets



If you see an inlet that has debris or is clogged, don't wait for someone else to clean it

Go Clean that Inlet

Inlets need to flow freely to reduce flooding



Grass Clippings



Grass Clippings should:

1. Sweep or Blow the grass clippings back over the grass to act as a lawn fertilizer.
2. Mulched in the lawn
3. Composted

Fertilizing



Fertilizing:

1. Follow the manufacturer's recommendation for fertilizing.
2. Don't Fertilize if there is rain forecasted within 24 hours
3. Over fertilizing and fertilizing just before a rain event will drain into the storm system and creeks causing the algae to grow and killing aquatic life.

Also is just a waste of money

Swimming Pools



Draining Swimming pools into the storm system is a source of pollutants into the Town's storm system.

In example, Chlorine will kill aquatic life and Backwash will drain debris into the town storm system.

Swimming Pools



To Reduce Pollutants into the Town's Storm System:

1. Swimming water to be dechlorinated before it discharges into the town's storm system or ditches.
2. Drain the backwash in an area that the debris can be collected and disposed properly.

Illicit Discharge or Illicit Connections



If you see an illicit discharge contact the Town Hall immediately.

Illicit Discharge includes:

- Discharge of mechanical fluid or chemicals in the storm system, ditches, creeks



Illicit Discharge or Illicit Connections



If you see an illicit discharge contact the Town Hall immediately.

Illicit Discharge includes:

- Discharge of mechanical fluid or chemicals in the storm system, ditches, creeks
- Swimming Pool backwash and chlorinated water
- Washing Machine effluent
- Sanitary Sewer connection to Storm system
- Private storm connections to Town's storm system

Illicit Discharge or Illicit Connections



If you see an illicit discharge contact the Town Hall immediately.

Illicit Discharge includes:

- Discharge of mechanical fluid or chemicals in the storm system, ditches, creeks
- Swimming Pool backwash and chlorinated water
- Washing Machine effluent
- Sanitary Sewer connection to Storm system
- Private storm connections to Town's storm system
- Silted Water from Construction Activities

Illicit Discharge - Call Town Hall



Questions?



ARTICLE 3.1200 EROSION CONTROL**Sec. 3.1201 General**

(a) The following rules and regulations governing the control of erosion and sedimentation within the jurisdiction of the Town of Double Oak are hereby adopted under the authority of the Constitution of Texas, and pursuant to the general laws of the state.

(b) Private property owners, developers, or builders shall be accountable for any erosion of their property or construction site which results in measurable accumulation of sedimentation in dedicated streets and ditches. No person shall allow an accumulation of sedimentation resulting from erosion deeper than one inch in any street, alley or other private property. Any person in violation hereof shall be punished as provided hereinafter.

(c) All persons who own, occupy or are in control of real property within the town limits comply with the following standards:

- (1) Maximum use shall be made of vegetation to minimize soil loss.
- (2) Natural vegetation should be retained wherever possible.
- (3) Where inadequate natural vegetation exists, or where it becomes necessary to remove existing natural vegetation, temporary controls must be installed promptly to minimize solid loss and insure that erosion and sedimentation does not occur.
- (4) An erosion control plan must be submitted to the town for approval by the building inspector or city engineer prior to actual construction. The review and inspection fee as provided for in the fee schedule in the appendix of this code will be due on submission.
- (5) Wastes or disposal areas and construction should be located and constructed in a manner that will minimize the amount of sediment entering streams and drainage ditches.
- (6) When work areas or material sources are located in or adjacent to live streams, such area shall be separated from the stream by a dike or other barrier to keep sediment from entering a flowing stream. Care shall be taken during the construction and removal of such barriers to minimize the sediment transport into a stream.
- (7) Should preventive measures fail to function effectively, the applicant shall act immediately to bring the erosion and/or siltation under control by whatever additional means are necessary.

(8) Rainfall and storm water runoff shall be diverted away from construction areas as much as possible.

(9) Developers, builders or owners of property shall permanently stabilize all disturbed areas prior to final acceptance of the subdivision, project and/or structure. Stabilization shall be accomplished through the use of perennial vegetative cover or other permanent means, such as channel lining, retaining wall, etc.

Sec. 3.1202 Permanent Erosion Controls Shall be Installed

Permanent erosion controls shall be installed at or near the end of the construction project when no further disturbance of the area will occur. The purpose of these controls is to permanently minimize soil loss by such methods as restoring ground cover, building retaining walls for steep slopes, or reducing wave or water action by lining channels or shorelines with gabions, jute mats, vegetation or similar materials. Examples of typical permanent measures are vegetation cover using perennial plants, headwalls, stilling basins, riprap, tree wells, gabions, matting along channels, retention lakes, terracing and retaining walls.

Sec. 3.1203 Temporary Erosion Control Methods Shall be Used to Abate Sediment Runoff From Construction Sites

Temporary erosion control methods shall be used to abate sediment runoff from construction sites. The application of control devices can yield significant water quality and drainage benefits at a minimal cost to the developer. The erosion control measures can be grouped as barriers, filter devices or routing devices.

Sec. 3.1204 Erosion Control Barriers

(a) The erosion control methods classified as acceptable barriers include:

- (1) Straw bale sediment barrier;
- (2) Sandbag sediment barrier;
- (3) Check dam; and
- (4) Sediment trap.

(b) The foregoing measures trap sediment and prevent high runoff velocities which cause erosion. Barrier devices are illustrated in the erosion control barriers figures. The straw bale and the sandbag sediment barriers can reduce sediment loads significantly. A sandbag barrier is more

durable and should be used to withstand more intense storm events. Siltation berms and check dams are not as effective for sediment removal as the other types of barriers and operate best in storm events of limited intensity.

Sec. 3.1205 Erosion Control Filters

(a) Filtering methods may be used in place of barriers. Filter devices allow runoff to pass through but retain sediment by filtration. The types of acceptable filters available are:

- (1) Filter berm;
- (2) Filter fence;
- (3) Filter inlet; and
- (4) Vegetation filter strip.

The erosion control filters figures are on file in the office of the city secretary and show typical erosion control filters.

(b) Excellent sediment removal can be achieved using a filter berm, fence or inlet. The filter berm is constructed of rock and therefore is capable of withstanding heavier storm events than the filter fence or filter inlet. In general, the vegetation filter strip will operate less effectively than the other devices.

Sec. 3.1206 Routing Devices

(a) Only one method, the flexible downdrain, is classified strictly as a routine device. Schematic of a downdrain is shown on file in the office of the city secretary. The purpose of the device is to convey waters down steep slopes or across highly erodible soils.

(b) Some of the methods classified under erosion control barriers can be used as routing devices to protect erodible areas. Sandbag sediment barriers and straw bale sediment barriers are both suitable for this purpose.

(c) A routing device is an erosion prevention tool that can eliminate erosion problems on steep slopes and other critical areas. It is not deigned to capture any solids already moving with the water.

Sec. 3.1207 Performance

(a) Erosion from construction sites can be a significant water quality problem. Developing areas are cleared of vegetation during construction, leaving the soil exposed and susceptible to erosion. Runoff then transports eroded sediment from these areas and deposits it downstream. The accumulation of silt in streams and ponds is a form of water pollution that is unattractive and

impedes drainage. No person shall cause, suffer, allow or permit an excessive accumulation of silt, sediment or soil in any stream or pond which originates on property owned or controlled by that person where such accumulation is caused by erosion.

(b) Prevention is a key aspect of erosion control. Many of the control methods presented herein can be placed in a manner that will protect highly erodible areas, such as steep slopes. The prevention of erosion requires prior planning to ascertain the placement of selected control methods. The rewards of this planning will be a significant reduction in soil loss. Not only can soil loss be prevented, but eroded soil can be recovered on the construction site and used for fill.

(c) The particulate material in construction site runoff is generally heavier and larger than particulate material in urban runoff. These attributes facilitate the removal of the material whether the removal is by settling in a sediment trap or by filtration through a filter fence. Temporary sediment traps, filters and routing devices can effectively control erosion for construction sites if properly applied. These methods are used in an effort to control temporary increases in sediment loads.

(d) A quantifiable assessment of performance is difficult because the nature of erosion control is more preventative than corrective. A rough assessment of performance can be conducted by comparing the soil loss from a site with controls to the loss from a comparable site without controls.

Sec. 3.1208 Design Considerations

(a) Sediment traps and flexible drains are flow collection devices that will require hydraulic design. An estimate of the peak design flow rate and runoff volume is necessary for proper sizing of these management methods. Runoff volume and peak flow are calculated based on the design storm. Design storms for temporary erosion control structures shall be based on the ten year return frequency.

(b) The design storm frequency for construction sites should consider several factors, including:

- (1) The length of time and size of construction activity;
- (2) The severity of damage that could result to downstream waters if the design storm is exceeded; and
- (3) Local concerns toward environmental protection.

(Ordinance 41 adopted 11/16/97)

Sec. 3.1209 Enforcement

(a) The town shall have a right of entry onto property to conduct such inspections as may be necessary to confirm that proper and effective erosion control measures have been constructed, implemented and installed. It shall be a violation of this article for any person to refuse such entry or to fail to call for such inspection in a timely manner. An inspection fee as set forth in the fee schedule in the appendix of this code shall be paid by the property owner or developer for each lot or tract of real property upon which a structure is to be built prior to the commencement of construction.

(b) Should proper erosion controls not be implemented, or should such controls fail or become inoperative, the town shall notify the person, owner, builder or developer of the violation in writing. The person, owner, builder or developer shall begin correcting the problem within five (5) days after delivery of written notice. Should the person, owner, builder or developer fail to commence and implement corrective measures within this five (5) day period, the town may, in addition to any other remedies provided by law, revoke the development permit, building permit, certificate of occupancy or withhold the issuance of any of the foregoing or the issuance of final acceptance.

(c) Any person violating any of the provisions of this article shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in a sum in accordance with the general penalty provision set forth in Section 1.109 of this code. Each separate offense may be punished separately and each day during which such violation occurs or continues shall be deemed to constitute a separate offense.

(Ordinance 12-09 adopted 10/15/12)

CHECKLIST FOR BUILDING

___ Building permit is posted on the jobsite so that it is visible from the street before any work is done on the structure. Erosion control/SWPPP must be onsite and maintained throughout the project until completion. Both are required before construction begins.

___ All structures must be built in accordance with the APPROVED plans attached to the original application on file in Town Hall, any changes to the structure will need to be approved by the building inspector.

___ Temporary utility service cannot be granted until all permits are obtained.

___ Permanent utility service cannot be granted until all fixtures are in place or safety cover plates are installed to protect anyone that may come in contact with wires.

___ Sanitary facilities must be provided for workmen during construction and must be in place before a permit can be issued.

___ No plumbing or electrical work shall be covered until required inspections have been made and approved.

___ Building area must be kept free of trash and litter during the building process by means of containers. It is unlawful to allow trash, building materials, and/or litter to be thrown, blown or accumulated on any town street, easement or property. Trash must be removed from site as needed but no longer than on a weekly basis.

___ Swimming pools must be fenced prior to filling and have self closing and latching gates with a fence 4 feet high and openings no larger than 4 inches.

___ \$55 fee will be paid for each red tag or re-inspection made. The fee shall be paid in advance of the inspection.

___ Grass and weeds must be kept lower than 10 inches in height.

The following inspections will be necessary during construction:

- ___ 1. Temporary Pole (T-Pole)
- ___ 2. Pier Hole (if applicable)
- ___ 3. Plumbing Rough (Water Test) & Form Board Survey
- ___ 4. Foundation
- ___ 5. Seconds:
 - ___ a. Framing
 - ___ b. Fireplace
 - ___ c. Electrical Rough-In
 - ___ d. Mechanical Rough-In
 - ___ e. Plumbing Top-Out (2-story Water Test)
 - ___ f. Gas (Air-Test)
 - ___ g. Brick Ties (As high as the installers can reach)
- ___ 6. Flat Work (approach & culvert) inspections can be made at any time during construction.
- ___ 7. Meter Releases
 - ___ a. Final Electrical (temp release 30 days only)
 - ___ b. Gas

SWIMMING POOLS

- ___ Ground Electrical / Belly Steel
- ___ Deck Steel
- ___ Fence inspection prior to plaster and filling of pool
- ___ Pool Final (electrical and plumbing)

ENGINEERING DESIGN MANUAL

CHECKLISTS

Please make sure the plans you are submitting are in accordance with this checklist. The following checklist will be used during the Plan Review.

Plat Application: **Preliminary Plat** **Preliminary Replat**
 Final Plat **Final Replat**

Engineering Plan: **Preliminary** **Final**

Site Construction Plan: **Preliminary** **Final** **Post Construction**

Storm Water Management: **Conceptual** **Preliminary** **Final**

Project Information

A. Name of Development: _____ B. Date: _____

C. Location of Development: _____

D. Type of Development: _____

E. Total area (acres): _____

F. Proposed Land Uses (zoning designations): _____

G. Anticipated project schedule: _____

H. Name of Owner: _____

I. Owner Telephone No.: _____ J. FAX No.: _____

K. Owner Contact Name: _____

L. Owner Address: _____

M. Owner Email Address: _____

N. Engineer/Surveyor's Name: _____

O. Engineer/Surveyor's Email Address: _____

P. Engineer/Surveyor Firm: _____

Q. Telephone No.: _____

PRELIMINARY PLAT CHECKLIST:

- 1. Ten (10) Sets of Final Plats submitted to the Town Yes ___ No ___ N/A ___
- 2. Preliminary plats shall be placed on maximum 24" x 36" sheets and drawn to a scale of 1" = 100' or 1" = 50' unless approved in advance by the Town. Yes ___ No ___ N/A ___
- 3. Title or name of the subdivision preceded by the words: "Preliminary Plat" Yes ___ No ___ N/A ___
- 4. Name, address and telephone number of the owner, applicant, survey, and/or engineer. Yes ___ No ___ N/A ___
- 5. Volume and page, or deed record number of the ownership deed from Denton County Deed Records. Yes ___ No ___ N/A ___
- 6. Vicinity map and key map, if multiple sheets are needed. Yes ___ No ___ N/A ___
- 7. Date of preparation, written and graphic scale, and north arrow. Yes ___ No ___ N/A ___
- 8. Boundary line of the proposed subdivision drawn with a heavy line. Yes ___ No ___ N/A ___
- 9. Computed gross acreage of the subdivision Yes ___ No ___ N/A ___
- 10. Metes and bounds description of the proposed subdivision. Yes ___ No ___ N/A ___
- 11. Location of the subdivision with respect to a corner of the survey or tract or an original corner of the survey of which it is a part. Yes ___ No ___ N/A ___
- 12. Names of adjoining subdivisions with lots and blocks shown with dashed lines and/or property owners of record for all contiguous unplatted properties. Yes ___ No ___ N/A ___
- 13. Town limits (if applicable). Yes ___ No ___ N/A ___
- 14. Location, dimension, and description and recording information for all existing rights-of-way, railroad rights-of-way, easements or other public ways on or adjacent to the property being developed. Yes ___ No ___ N/A ___
- 15. Show permanent structures or uses that will remain. Yes ___ No ___ N/A ___
- 16. Sizes and flowlines of existing drainage structures, 100-year floodplain and floodway as defined by FEMA. Yes ___ No ___ N/A ___
- 17. Location, size and type of all existing utilities within or adjacent lot the site. Yes ___ No ___ N/A ___

- 18. Number each proposed lot and block. Provide the proposed number of lots. Yes ___ No ___ N/A ___
- 19. Existing two (2) foot interval contours referenced to NAD. Yes ___ No ___ N/A ___
- 20. Proposed streets, alleys, drainage ways, parks, open spaces, easements, other public areas and other rights-of-way within the subdivision. Dimensions of all easements and rights-of-way. Yes ___ No ___ N/A ___
- 21. Dimensions for all lots. Gross acreage for all non-residential lots. Approximate acreage for areas in residential use. Approximate acreage of streets, parks, and other non-residential uses. Yes ___ No ___ N/A ___
- 22. Front building setback lines, side and rear building setback lines. Yes ___ No ___ N/A ___
- 23. Preliminary Storm Water Management Plan meeting the requirements of the Engineering Design Manual shall be submitted with the Preliminary Plat. (Checklist in App. C) Yes ___ No ___ N/A ___
- 24. Preliminary Plat approval block as described by the Subdivision Regulation Ordinance. Yes ___ No ___ N/A ___
- 25. Where the Preliminary Plat is part of a larger area owned by the Applicant that will be subsequently subdivided, provide a layout of the larger area showing the tentative layout of streets, blocks, drainage, water, sewerage, and other improvements for the larger area. Yes ___ No ___ N/A ___

FINAL PLAT CHECKLIST

- 1. Ten (10) Sets of Final Plats submitted to the Town Yes ___ No ___ N/A ___
- 2. Final plats shall be placed on maximum 24" x 36" sheets and drawn to a scale of 1" = 100' or 1" = 50' unless approved in advance by the Town. Yes ___ No ___ N/A ___
- 3. Title or name of the subdivision preceded by the words "Final Plat" Yes ___ No ___ N/A ___
- 4. Name address and telephone number of the owner, applicant, survey, and/or engineer. Yes ___ No ___ N/A ___
- 5. Vicinity map and key map if multiple sheets are needed. Yes ___ No ___ N/A ___
- 6. Date, written and graphic scale, and north arrow. Yes ___ No ___ N/A ___
- 7. Boundary line of subdivision drawn with a heavy line and with bearings, dimensions and curve data. Yes ___ No ___ N/A ___
- 8. Names of adjoining subdivisions with lots and blocks shown with dashed lines and/or property owners of record for all contiguous unplatted properties. Yes ___ No ___ N/A ___

9. Town limits, if applicable. Yes ___ No ___ N/A ___
10. Proposed streets, alleys, drainageways, parks, open spaces, easements, other public areas and other rights-of-way within the subdivision including dimensions, bearings and curve data. Yes ___ No ___ N/A ___
11. Location, dimension, description and recording information for all existing rights-of-way, railroad rights-of-way, easements or other public ways on or adjacent to the property being platted. Yes ___ No ___ N/A ___
12. Location and description of all permanent monuments and control points Yes ___ No ___ N/A ___
13. Final Storm Water Management Plan meeting the requirements of the Engineering Design Manual shall be submitted with the Preliminary Plat. (Checklist in App. C) Yes ___ No ___ N/A ___
14. Floodways / Floodplains (FEMA):
- a. Show the ultimate 100-year water surface elevation. Yes ___ No ___ N/A ___
 - b. Show floodplain and floodway boundaries. Yes ___ No ___ N/A ___
 - c. Drainage Floodway easement limits Yes ___ No ___ N/A ___
 - d. Minimum fill and floor elevations specified. Yes ___ No ___ N/A ___
15. Minimum building setback lines. Yes ___ No ___ N/A ___
16. Lot and block numbers. Yes ___ No ___ N/A ___
17. Approval block in the form prescribed by the Subdivision Regulations Ordinance. Yes ___ No ___ N/A ___
18. Abutting property owner names and recording information. Yes ___ No ___ N/A ___
19. Gross acreage of the land being subdivided Yes ___ No ___ N/A ___
26. Added the note for buildings within 1,000 feet from existing oil or gas well as described by the Subdivision Regulation Ordinance. Yes ___ No ___ N/A ___
20. Owner's certificate of deed or dedication with the following: Yes ___ No ___ N/A ___
- a. Metes and bounds description. Yes ___ No ___ N/A ___
 - b. Representation that dedicators own the property. Yes ___ No ___ N/A ___
 - c. Dedication statement. Yes ___ No ___ N/A ___
 - d. Reference and identification or name of final plat. Yes ___ No ___ N/A ___

e. Surveyor certification in the form prescribed by the Subdivision Regulation Ordinance. Yes ___ No ___ N/A ___

21. Certificate showing all taxes have been paid. Yes ___ No ___ N/A ___

22. A letter fully outlining and alterations from the approved Preliminary Plat. Yes ___ No ___ N/A ___

ENGINEERING SITE PLAN – Each Engineering Site Plan shall include:

1. Engineering Site plans shall be placed on maximum 22" x 34" sheets and drawn to a scale of 1" = 100' or 1" = 50' unless approved in advance by the Town. Yes ___ No ___ N/A ___

2. Title block in lower right hand corner including:

a. Subdivision name with lot and block number. Yes ___ No ___ N/A ___

b. Area in acres. Yes ___ No ___ N/A ___

c. Metes and bounds description including survey name and abstract number. Yes ___ No ___ N/A ___

d. Town and County. Yes ___ No ___ N/A ___

e. Preparation Date. Yes ___ No ___ N/A ___

3. Name, address and telephone number of the owner, applicant, and surveyor/engineer. Yes ___ No ___ N/A ___

4. Vicinity map and key map, if multiple sheets are needed. Yes ___ No ___ N/A ___

5. Written scale, graphic scale and north arrow. Yes ___ No ___ N/A ___

6. Approximate distance to the nearest street. Yes ___ No ___ N/A ___

7. Site boundaries, dimensions, lot lines and lot areas. Yes ___ No ___ N/A ___

8. Legend. Yes ___ No ___ N/A ___

9. Site data summary table including:

a. Zoning. Yes ___ No ___ N/A ___

b. Proposed use. Yes ___ No ___ N/A ___

c. Building area (gross square footage). Yes ___ No ___ N/A ___

d. Building height (feet and inches). Yes ___ No ___ N/A ___

e. Area of impervious surface. Yes ___ No ___ N/A ___

f. Total Parking: Required and provided. Yes ___ No ___ N/A ___

g. Number of handicap parking spaces. Yes ___ No ___ N/A ___

- h. Number of dwelling units and number of bedrooms (multifamily). Yes ___ No ___ N/A ___
10. Existing improvements within 75' of the subject property. Yes ___ No ___ N/A ___
11. Land use, zoning, subdivision name, recording information and adjacent owners. Yes ___ No ___ N/A ___
12. Building locations, sizes, and dimensions. Yes ___ No ___ N/A ___
13. Distance between buildings on the same lot. Yes ___ No ___ N/A ___
14. Building lines and setbacks. Yes ___ No ___ N/A ___
15. Dimensions of all drive lanes and traffic flow arrows. Yes ___ No ___ N/A ___
16. FEMA floodplains with elevations, and minimum finished floor elevations (include the floodplain note shown on the final plat). Yes ___ No ___ N/A ___
17. Public streets, private drives, and fire lanes with pavement widths and including rights-of-way, median openings, turn lanes, existing driveways, adjacent existing driveways with dimensions, radii, and surface. Yes ___ No ___ N/A ___
18. Distances between existing and proposed driveways. Yes ___ No ___ N/A ___
19. Loading and unloading areas. Yes ___ No ___ N/A ___
20. Ramps, crosswalks, sidewalks and barrier-free ramps with dimensions. Yes ___ No ___ N/A ___
21. Locations of dumpsters and trash compactors with height and material of screening. Yes ___ No ___ N/A ___
22. Size, location, dimensions and details of all signs and exterior lighting of signs, including type of standards, locations and radius of light and intensity of foot-candles. All signage are subject to approval by the Building Inspections Department. Yes ___ No ___ N/A ___
23. Location and sizes of existing and proposed water and sewer mains. Yes ___ No ___ N/A ___
24. Location of fire hydrants. Yes ___ No ___ N/A ___
25. Location and sizes of storm drains, culverts, inlets and other drainage features on or adjacent to the site. Yes ___ No ___ N/A ___
26. Locations, widths, and types of existing and proposed easements. Yes ___ No ___ N/A ___
27. Provide an elevation of all four sides of the building including materials, colors and dimensions at an architectural scale of 1"=20'. Yes ___ No ___ N/A ___
28. Landscape plan provided on separate sheet to show the following: Yes ___ No ___ N/A ___
- a. Natural features including tree masses and anticipated tree loss. Yes ___ No ___ N/A ___
- b. Floodplains, drainageways and creeks. Yes ___ No ___ N/A ___
- c. Screening walls and fences, retaining walls, headlight screens, and service area screens including height and type of Yes ___ No ___ N/A ___

construction.

- d. Existing and preserved trees including location, size, and species. Yes ___ No ___ N/A ___
- e. Landscaping materials including location and size. Yes ___ No ___ N/A ___
- f. Proposed plant materials. Yes ___ No ___ N/A ___
- g. Note to indicate type and placement of irrigation system. Yes ___ No ___ N/A ___
- 29. 2" x 3" blank box in lower right corner for Town use. Yes ___ No ___ N/A ___
- 30. Additional information as requested to clarify the proposed development. Yes ___ No ___ N/A ___

SITE CONSTRUCTION PLAN – Site Construction Plan shall include:

COVER SHEET * - The cover sheet shall include:

- 1. Project title and type of project. Yes ___ No ___ N/A ___
- 2. Location map. Yes ___ No ___ N/A ___
- 3. Disposal site for excess excavation. Yes ___ No ___ N/A ___
- 4. Index of Sheets (if not included on its own sheet). Yes ___ No ___ N/A ___
- 5. Approval blocks for Town including Town Engineer and Director of Public Works. Yes ___ No ___ N/A ___
- 6. Professional Engineer’s seal, signature and date. Yes ___ No ___ N/A ___
- 7. “Release for Construction” note. Yes ___ No ___ N/A ___

* NOTE: If the Cover Sheet is not furnished, information should appear on other sheets.

GENERAL

- 1. North arrow clearly shown on each plan sheet. Yes ___ No ___ N/A ___
- 2. Bench marks shown on each sheet; located on permanent structure outside of construction limits and conveniently spaced (500' +). Yes ___ No ___ N/A ___
- 3. Title blocks, title, sheet number and scales shown. Yes ___ No ___ N/A ___
- 4. Each sheet must bear the seal of a Licensed Professional Engineer, signature, and date. Yes ___ No ___ N/A ___
- 5. Street names on each sheet. Yes ___ No ___ N/A ___
- 6. Property owners and property lines shown. Yes ___ No ___ N/A ___
- 7. Submit four (4) sets of plans for review on 22” x 34” sheets. Yes ___ No ___ N/A ___
- 8. Prepare plans on 22” x 34” sheets allowing for half size reduction to 11” x 17”. Yes ___ No ___ N/A ___

- 9. Text shall be legible on the half size 11" x17" plans. Yes ___ No ___ N/A ___
- 10. Place standard general notes on plans. Yes ___ No ___ N/A ___
- 11. Existing, proposed and future facilities must clearly be defined. Yes ___ No ___ N/A ___
- 12. Project name on right end of plan sheets. Yes ___ No ___ N/A ___

GRADING * – Each grading plan shall include:

- 1. Horizontal scale for grading plans shall be at 1" = 20' on full size drawings. Yes ___ No ___ N/A ___
- 2. Existing one-foot contours based on an on-the-ground survey or controlled aerial topographic map (dashed lines and labeled) to extend 20 feet from property line onto adjacent property. Yes ___ No ___ N/A ___
- 3. Proposed one-foot contours – solid lines and labeled. Yes ___ No ___ N/A ___
- 4. Show top of curb elevation every 50 feet on streets, alleys, existing and proposed parking lots. Yes ___ No ___ N/A ___
- 5. Slope:
 - a. Back of street curb to property line: ¼" per foot. Yes ___ No ___ N/A ___
 - b. Parking lot top of curb to property line: Maximum 4 (horizontal) to 1 (vertical). Yes ___ No ___ N/A ___
 - c. Any unpaved area to property line: Maximum slope of 4:1. Yes ___ No ___ N/A ___
 - d. Show driveways with ¼" per foot + 6" from street gutter up to property line. Yes ___ No ___ N/A ___
- 6. Letter of approval if grading is proposed on adjacent property. Yes ___ No ___ N/A ___
- 7. Utility easement from abutting property owners. Yes ___ No ___ N/A ___
- 8. Proposed inlets, label and size. Yes ___ No ___ N/A ___
- 9. Proposed pipes, label and size. Yes ___ No ___ N/A ___
- 10. Existing inlets and pipes. Yes ___ No ___ N/A ___

* NOTE: Add statement that grading only is being submitted with these plans.

PAVING PLAN – Each Paving Plan shall include:

- 1. Horizontal scale for paving plans shall be at 1" = 20' on full size drawings. Yes ___ No ___ N/A ___
- 2. Right-of-way, street, alley, drives and sidewalks dimensioned. Yes ___ No ___ N/A ___
- 3. Centerline stations shown. Yes ___ No ___ N/A ___
- 4. Limits of work defined. Yes ___ No ___ N/A ___

- 5. Barrier free ramps at all intersections. Yes ___ No ___ N/A ___
- 6. Pavement transitions. Yes ___ No ___ N/A ___
- 7. Traffic control items; striping, traffic buttons, sign. Yes ___ No ___ N/A ___
- 8. Street lighting. Yes ___ No ___ N/A ___
- 9. Concrete pavement thickness. Yes ___ No ___ N/A ___
- 10. Minimum 3,600 psi in 28 days concrete compressive strength. Yes ___ No ___ N/A ___
- 11. 6" curbs. Yes ___ No ___ N/A ___
- 12. Minimum reinforcement with No. 4 bars 24" o.c. both ways. Yes ___ No ___ N/A ___
- 13. Sidewalks to be 4" thick, 3,600 psi in 28 days, reinforced with No. 3 bars 14" O.C.E.W. Yes ___ No ___ N/A ___
- 14. Expansion joints at intersection and at minimum 600 foot intervals for pavement. Yes ___ No ___ N/A ___
- 15. Saw cut at 15-, 17.5- and 20-foot intervals for 6-inch, 7-inch and 8-inch pavements respectively. Yes ___ No ___ N/A ___
- 16. Radius at corners conform to Table II-2. Yes ___ No ___ N/A ___
- 17. Gutter flow arrows. Yes ___ No ___ N/A ___
- 18. Roadways comply with thoroughfare plan. Yes ___ No ___ N/A ___
- 19. Geometrics meet design speed criteria. Yes ___ No ___ N/A ___
- 20. Is Superelevation required? Yes ___ No ___ N/A ___
- 21. Retaining Walls:
 - a. Type, beginning and ending locations and wall elevations. Yes ___ No ___ N/A ___
 - b. Provide design if non-standard or modified. Yes ___ No ___ N/A ___
 - c. Drainage behind walls shown. Yes ___ No ___ N/A ___
- 22. Driveway grades shown. Yes ___ No ___ N/A ___
- 23. Prepare plans and necessary forms for TDLR plans review and field inspection. Yes ___ No ___ N/A ___
- 24. Developer to pay for all review and inspection fees. Yes ___ No ___ N/A ___

PAVING PROFILES AND GRADES – Plans shall include:

- 1. Vertical scale for paving profiles shall be at 1" = 4' on full size drawings. Yes ___ No ___ N/A ___
- 2. Profiles plotted showing ground at proposed property line. Yes ___ No ___ N/A ___

- | | |
|--|---------------------------|
| 3. Top of curb profiles must meet minimum and maximum grade requirements. | Yes ____ No ____ N/A ____ |
| 4. Driveway profile grades. | Yes ____ No ____ N/A ____ |
| 5. Vertical curves must be designed in accordance with Table II-5. | Yes ____ No ____ N/A ____ |
| 6. Contour grading plans for major intersections. | Yes ____ No ____ N/A ____ |
| 7. Spot top of curb elevations in plan view on proposed left turn lanes. | Yes ____ No ____ N/A ____ |
| 8. Check carefully for any place water might pond. Are inlets located at sag points or vertical curves? | Yes ____ No ____ N/A ____ |
| 9. Are grades, crossfall, slopes, etc., consistent with information shown on typical section? | Yes ____ No ____ N/A ____ |
| 10. Check ends of project for drainage. If gutters drain to ditches or field type inlets, are grades and profiles shown? | Yes ____ No ____ N/A ____ |
| 11. Minimum grades maintained to assure complete drainage. | Yes ____ No ____ N/A ____ |

WATER – All water distribution and transmission facilities shall include:

- | | |
|---|---------------------------|
| 1. Approval letter to connect to the waste line from Bartonville Water Supply Corporation | Yes ____ No ____ N/A ____ |
| 2. Horizontal scale for plan views shall be at 1" = 20' on full size drawings. | Yes ____ No ____ N/A ____ |
| 3. Vertical scale for profile views shall be at 1" = 4' on full size drawings. | Yes ____ No ____ N/A ____ |
| 4. Loop water mains. | Yes ____ No ____ N/A ____ |
| 5. Valves on fire hydrant leads. | Yes ____ No ____ N/A ____ |
| 6. Valves on main lines between each fire hydrant. | Yes ____ No ____ N/A ____ |
| 7. Maximum distance between each fire hydrant. | |
| a. Residential – 500' c-c on street. | Yes ____ No ____ N/A ____ |
| b. Multifamily – 400' c-c on street. | Yes ____ No ____ N/A ____ |
| c. Office, retail, commercial, industrial 300' c-c on street. | Yes ____ No ____ N/A ____ |
| 8. All portions of building within 300' radius of a fire hydrant in commercial. | Yes ____ No ____ N/A ____ |
| 9. All portions of building within 400' radius of a fire hydrant in multifamily. | Yes ____ No ____ N/A ____ |
| 10. All portions of buildings within 500' radius of a fire hydrant in single family and duplex residential. | Yes ____ No ____ N/A ____ |
| 11. Maximum length non-looped line serving a fire hydrant is 150 feet. | Yes ____ No ____ N/A ____ |
| 12. Lateral service (min. 1" copper) from main line to two feet from ROW. | Yes ____ No ____ N/A ____ |

13. Water main extended to opposite property line or tied to existing main. Yes ___ No ___ N/A ___
14. Profile mains 12" and larger. Yes ___ No ___ N/A ___
15. Show other utility lines crossing wastewater lines. Yes ___ No ___ N/A ___
16. Show location of water meters:
- a. Domestic. Yes ___ No ___ N/A ___
 - b. Irrigation. Yes ___ No ___ N/A ___
 - c. Fire line. Yes ___ No ___ N/A ___
17. Show size of water meters. Yes ___ No ___ N/A ___
18. Note minimum pipe covers (attach water and standard details and general notes). Yes ___ No ___ N/A ___
19. Dedicate water line easements up to and including fire hydrants and water meters for lines off ROW. Yes ___ No ___ N/A ___

WASTEWATER – All wastewater plans shall include:

1. Approval letter to connect to the wastewater collection agency (i.e. Flower Mound, Highland Village, Upper Trinity, Private) Yes ___ No ___ N/A ___
2. Horizontal scale for plan views shall be at 1" = 20' on full size drawings. Yes ___ No ___ N/A ___
3. Vertical scale for profile views shall be at 1" = 4' on full size drawings. Yes ___ No ___ N/A ___
4. 8" minimum, PVC SDR-35 (unless 6-inch approved by Town). Yes ___ No ___ N/A ___
5. Manhole at end of all lines. Yes ___ No ___ N/A ___
6. Manholes at change of pipe size, tees and bends. Yes ___ No ___ N/A ___
7. 500' maximum distance between manholes on lines 21" and smaller.
800' maximum distance between manholes on lines 24" and larger. Yes ___ No ___ N/A ___
8. Minimum slopes:
- a. 6" – 0.50% (Pipe size as approved by Town). Yes ___ No ___ N/A ___
 - b. 8" – 0.33%. Yes ___ No ___ N/A ___
 - c. 10" – 0.25%. Yes ___ No ___ N/A ___
 - d. 12" – 0.20%. Yes ___ No ___ N/A ___
 - e. 15" – 0.14%. Yes ___ No ___ N/A ___
 - f. 18" – 0.12%. Yes ___ No ___ N/A ___
9. Maximum slope such that velocity is less than 10 fps. Yes ___ No ___ N/A ___

- | | |
|---|------------------------|
| 10. Sewer laterals 10' downstream from water service or to center of lot. | Yes ___ No ___ N/A ___ |
| 11. Minimum lateral size: | |
| a. Residential, 4". | Yes ___ No ___ N/A ___ |
| b. Apartment, retail or commercial – 6". | Yes ___ No ___ N/A ___ |
| c. Manufacturing or industrial – 8". | Yes ___ No ___ N/A ___ |
| 12. Profile all sewer lines except laterals. | Yes ___ No ___ N/A ___ |
| 13. Show other utility lines crossing wastewater lines. | Yes ___ No ___ N/A ___ |
| 14. Label lines to correspond to profile. | Yes ___ No ___ N/A ___ |
| 15. Concrete encasement at creek crossing. | Yes ___ No ___ N/A ___ |
| 16. Provide stub outs to adjacent property. Add services for Planned Development Communities. | Yes ___ No ___ N/A ___ |
| 17. Note benchmark on all sheets. | Yes ___ No ___ N/A ___ |
| 18. 10' utility easement provided for lines not in ROW. | Yes ___ No ___ N/A ___ |

UTILITIES – All plans shall show the following:

- | | |
|---|------------------------|
| 1. Existing and proposed facilities shown in plan and profiles views. | Yes ___ No ___ N/A ___ |
| 2. Underground facilities close to or in conflict with proposed construction located by actual ties and elevations. | Yes ___ No ___ N/A ___ |
| 3. Caution notes shown when construction operations come close to existing utilities. Telephone number of utility contact shall be shown. | Yes ___ No ___ N/A ___ |

EROSION CONTROL – All plans shall show the following:

- | | |
|--|------------------------|
| 1. The scale for Erosion Control Plans may vary however shall be prepared on sheets no smaller than 1" = 100' on full size drawings. | Yes ___ No ___ N/A ___ |
| 2. Existing and Proposed Grading. | Yes ___ No ___ N/A ___ |
| 3. Existing and Proposed Drainage Features. | Yes ___ No ___ N/A ___ |
| 4. Erosion features including temporary construction entrance, silt fence, inlet protection, rock berms, seeding, etc. | Yes ___ No ___ N/A ___ |
| 5. Erosion control standard details. | Yes ___ No ___ N/A ___ |

PAVEMENT MARKINGS AND SIGNAGE

- 1. The scale for Pavement Marking Plans may vary however shall be prepared on sheets no smaller than 1" = 100' on full size drawings. Yes ___ No ___ N/A ___
- 2. Pavement Markings and Signage Plan in accordance with MUTCD. Yes ___ No ___ N/A ___
- 3. Pavement Markings Standard Details. Yes ___ No ___ N/A ___

TRAFFIC CONTROL PLAN

- 1. The scale for Traffic Control Plans may vary however shall be prepared on sheets no smaller than 1" = 200' on full size drawings. Yes ___ No ___ N/A ___
- 2. Traffic Control Plan in accordance with MUTCD. Yes ___ No ___ N/A ___
- 3. Traffic Control Standard Details. Yes ___ No ___ N/A ___
- 4. Traffic Control Phasing as necessary. Yes ___ No ___ N/A ___

LANDSCAPE AND IRRIGATION PLANS

- 1. The scale for Landscape and Irrigation Plans may vary however shall be prepared on sheets no smaller than 1" = 100' on full size drawings. Yes ___ No ___ N/A ___
- 2. Landscape Plan showing rights-of-way and proposed back of curbs, sidewalk, existing; and proposed utilities and other features pertinent to the plan. Yes ___ No ___ N/A ___
- 3. Planting details. Yes ___ No ___ N/A ___
- 4. Irrigation Plans including metering, back flow prevention, and provision for electrical service and controllers. Yes ___ No ___ N/A ___
- 5. Irrigation details. Yes ___ No ___ N/A ___

STREET LIGHTING

- 1. The scale for Street Lighting Plans may vary however shall be prepared on sheets no smaller than 1" = 100' on full size drawings. Yes ___ No ___ N/A ___
- 1. Lighting and Conduit Layout Plan. Yes ___ No ___ N/A ___
- 2. Lighting Standard Details. Yes ___ No ___ N/A ___

POST CONSTRUCTION

- 1. Temporary Erosion Control Devices removed. Yes ___ No ___ N/A ___
- 2. Contractor completed Punchlist items Yes ___ No ___ N/A ___
- 3. Notice of Termination (NOT) submitted to TCEQ and copy of executed NOT submitted to Town. Yes ___ No ___ N/A ___
- 4. Texas Accessibility Standards (TAS) Inspection approved by TDLR and copy of approved inspection submitted to Town. Yes ___ No ___ N/A ___
- 5. Contractor submitted As-Built drawings to the Town (Public Projects). Yes ___ No ___ N/A ___
- 6. Engineer submitted Record Drawings to the Town. Yes ___ No ___ N/A ___
(Both Public and Private Projects)
 - a. One (1) Full Size Bond Record Drawing Set
 - b. Two (2) Half Size Bond Record Drawing Set
 - c. Two (2) Compact Disk with the Digital Record Drawing Set
 - One (1) Digital CAD files with reference files merged
 - One (1) PDF Set (300 dpi)
- 7. Contractor submitted Affidavit of payment to sub-contractor, vendors, and suppliers. Yes ___ No ___ N/A ___
- 8. Contractor submitted Surety consent for final payment to town. Yes ___ No ___ N/A ___
- 9. Contractor submitted an acceptance letter from water and sewer provider to the Town. Yes ___ No ___ N/A ___
- 10. Certificate of Completion signed by Contractor and Town. Yes ___ No ___ N/A ___

ENGINEER'S CHECKLIST FOR CONCEPTUAL STORM WATER MANAGEMENT PLAN

Please attach additional sheets as necessary for comments and descriptions.

1. Planning Concerns

- A. Have any previous drainage or watershed plans been completed in the watershed? (If yes, describe) Yes ___ No ___ N/A ___
- B. Is there any known history of flooding downstream? (If yes, describe conditions and locations) Yes ___ No ___ N/A ___
- C. Is there any known history of excessive erosion downstream? (If yes, describe conditions and locations) Yes ___ No ___ N/A ___
- D. Are there any known downstream drainage constrictions such as undersized culverts or channels? Size? Yes ___ No ___ N/A ___
- E. Are there any FEMA 100-year floodplains which will need flood studies, CLOMRs, LOMRs, etc., for this project? Yes ___ No ___ N/A ___
- F. Are there any known or suspected wetlands areas, mitigation areas, 404 permit areas, or other natural habitat features which require special consideration? Yes ___ No ___ N/A ___
- G. Are there any existing dams over six feet in height which are or will be subject to TCEQ regulations? Yes ___ No ___ N/A ___
- H. Are there any existing impoundments subject to TCEQ water rights permitting? (Livestock ponds are not exempt when converted to other uses.) Yes ___ No ___ N/A ___
- I. Are there any existing environmental concerns on the site requiring special treatment or design consideration (i.e. fuel stations, vehicle maintenance, auto recycling, illegal dump sites, outdoor material storage, loading and transfer areas, landfills, industrial facilities, etc.)? Yes ___ No ___ N/A ___

2. Existing Conditions Map(s) showing the following information on or adjacent to the development site:

- A. Digital ortho-photography showing project boundaries Yes ___ No ___ N/A ___
- B. Existing topography (normally 2-foot contours) Yes ___ No ___ N/A ___
- C. Soil types from USDA soil surveys and/or soil borings Yes ___ No ___ N/A ___
- D. Perennial or intermittent streams Yes ___ No ___ N/A ___
- E. Boundaries of existing predominant vegetation Yes ___ No ___ N/A ___
- F. Delineation of current FEMA floodplains and floodways Yes ___ No ___ N/A ___
- G. Locations of steep slopes (>15%) Yes ___ No ___ N/A ___
- H. Locations of wetlands and natural habitat areas if known. Yes ___ No ___ N/A ___
- I. Locations of all dams and impoundments Yes ___ No ___ N/A ___
- J. Existing paved roads, buildings, and other impervious areas Yes ___ No ___ N/A ___
- K. Environmental concerns identified in (2.H) above Yes ___ No ___ N/A ___
- L. Existing major utilities, pipelines, and easements Yes ___ No ___ N/A ___

3. Does this development provide opportunities for Low-Impact Design?

- A. Preserve floodplains and natural valley storage? Yes ___ No ___ N/A ___
- B. Preserve natural streams and drainage patterns? Yes ___ No ___ N/A ___
- C. Preserve steep slopes? Yes ___ No ___ N/A ___
- D. Preserve trees and undisturbed natural vegetation? Yes ___ No ___ N/A ___
- E. Preserve wetlands and other natural features? Yes ___ No ___ N/A ___
- F. Drain runoff to pervious areas? Yes ___ No ___ N/A ___
- G. Utilize natural drainage vs. storm drain systems? Yes ___ No ___ N/A ___
- H. Reduce pavement and other impervious covers? Yes ___ No ___ N/A ___

4. Conceptual analysis of hydrologic and hydraulic impacts of the proposed development:

- A. Hydrologic analysis to determine conceptual rates of runoff, volumes, and velocities to support decisions related to flood control and erosion protection downstream. Yes ___ No ___ N/A ___
- B. Conceptual estimates of the three (3) storm design approach requirements. Yes ___ No ___ N/A ___
- C. Conceptual selection, location, and size of proposed storm water structural controls. Yes ___ No ___ N/A ___
- D. Conceptual limits of proposed clearing and grading. Yes ___ No ___ N/A ___

5. Conceptual Drainage Area Map(s) showing the following information for the development site:

- A. Conceptual street layout (scale 1"=200') Yes ___ No ___ N/A ___
- B. All off-site drainage areas with topography (reduced scale) Yes ___ No ___ N/A ___
- C. Delineation of watershed boundaries with flow arrows Yes ___ No ___ N/A ___
- D. Reference info (file number, etc.) for previous drainage studies or existing developments & drainage facilities Yes ___ No ___ N/A ___
- E. Approximate zone of influence for all outfalls Yes ___ No ___ N/A ___
- F. Downstream constrictions, flooding, or erosion locations Yes ___ No ___ N/A ___
- G. Location of proposed structural storm water controls, if any Yes ___ No ___ N/A ___

(seal)	<p>I certify that this Conceptual Storm Water Management Plan, including this checklist, required attachments, and additional comments, was prepared under my responsible supervision and that the information presented on this checklist and attachments is correct to the best of my knowledge. I also understand that an acceptance of this plan by the Town does not waive any Town standards or requirements unless a specific waiver request has been submitted and approved.</p> <p>Signed _____ Date _____</p> <p>Print Name: _____ PE No _____</p>
--------	--

ENGINEER'S CHECKLIST FOR PRELIMINARY STORM WATER MANAGEMENT PLAN

Please attach additional sheets as necessary for comments and descriptions.

1. Changes or Modifications to Conceptual Site Plan (May be reprinted with changes tracked or highlighted)

2. Preliminary Project Layout Map(s) shows the following information on or adjacent to the development site:

- | | | | |
|--|---------|--------|---------|
| A. Digital ortho-photography showing project boundaries | Yes ___ | No ___ | N/A ___ |
| B. Existing topography (normally 2-foot contours) | Yes ___ | No ___ | N/A ___ |
| C. Preliminary street and lot layout | Yes ___ | No ___ | N/A ___ |
| D. Benchmarks used for site control | Yes ___ | No ___ | N/A ___ |
| E. Construction phasing plan, if applicable | Yes ___ | No ___ | N/A ___ |
| F. Limits of proposed clearing and grading | Yes ___ | No ___ | N/A ___ |
| G. Proposed dams > 6' high (attach Dam Safety Checklist) | Yes ___ | No ___ | N/A ___ |
| H. Proposed FEMA floodplains with flood study reference info | Yes ___ | No ___ | N/A ___ |
| I. Proposed ponds subject to TCEQ water rights permits | Yes ___ | No ___ | N/A ___ |
| J. If yes, has water rights permit been applied for? | Yes ___ | No ___ | N/A ___ |

3. Preliminary Drainage Area Map(s) shows the following information for the development site:

- | | | | |
|--|---------|--------|---------|
| A. Preliminary street and lot layout (scale 1"=200') | Yes ___ | No ___ | N/A ___ |
| B. All off-site drainage areas with topography (reduced scale) | Yes ___ | No ___ | N/A ___ |
| C. Delineation of watershed boundaries with flow arrows | Yes ___ | No ___ | N/A ___ |
| D. Proposed modifications to watershed boundaries | Yes ___ | No ___ | N/A ___ |
| E. File numbers for existing developments & drainage facilities | Yes ___ | No ___ | N/A ___ |
| F. Zoning or Comp Plan info to document off-site land use | Yes ___ | No ___ | N/A ___ |
| G. Preliminary hydrology with supporting data & calculations for on-site existing & proposed, & off-site ultimate conditions | Yes ___ | No ___ | N/A ___ |
| H. Proposed detention ponds or other storm water controls, with summary hydrology for all applicable design storms | Yes ___ | No ___ | N/A ___ |
| I. Delineate entire zone of influence for all outfalls | Yes ___ | No ___ | N/A ___ |
| J. Downstream constrictions, flooding, or erosion locations | Yes ___ | No ___ | N/A ___ |

K. Proposed facilities with private maintenance (Maintenance Agreement and Maintenance Plan required for final)

Yes ____ No ____ N/A ____

4. Determination of Adequate Outfalls and Zones of Influence: Describe these and provide supporting methodology:

5. Description of Any Proposed Waiver Requests: (for informational purposes only; all Waiver Requests must follow published procedures)

6. Other Comments:

(seal)	<p>I certify that this Preliminary Storm Water Management Plan, including this checklist, required attachments, and additional comments, was prepared under my responsible supervision and that the information presented on this checklist and attachments is correct to the best of my knowledge. I also understand that an acceptance of this plan by the Town does not waive any Town standards or requirements unless a specific waiver request has been submitted and approved.</p> <p>Signed _____ Date _____ Print Name: _____ PE No _____</p>
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ENGINEER'S CHECKLIST FOR FINAL STORM WATER MANAGEMENT PLAN

Please attach additional sheets as necessary for comments and descriptions.

1. Changes or Modifications to Preliminary Storm Water Management Plan (May be reprinted with changes tracked or highlighted)

2. Additional Study Attachments (include if applicable)

- A. Dam Safety Checklist Yes ___ No ___ N/A ___
- B. Storm Water Pollution Prevention Plan (SWPPP) Yes ___ No ___ N/A ___
- C. Executed Maintenance Agreement (with Maintenance Plan) Yes ___ No ___ N/A ___
- D. Landscaping Plan (for Storm Water controls) Yes ___ No ___ N/A ___
- E. Copy of approved Waiver Request Yes ___ No ___ N/A ___

3. Applicable Local, State and Federal Permits (Indicate acquired or application pending)

- A. CLOMR, LOMR or LOMA Yes ___ No ___ N/A ___
- B. TCEQ water rights permit Yes ___ No ___ N/A ___
- C. 404 permit Yes ___ No ___ N/A ___
- D. Other: _____ Yes ___ No ___ N/A ___
- E. Other: _____ Yes ___ No ___ N/A ___

4. Hydrologic Analysis and Storm Water Management Design Plan (separate Attachment, either A or B and C)

- A. Approved Infrastructure Plans.
Attach a copy of the signed cover sheet. Yes ___ No ___ N/A ___
Plan File No.:
- B. Site SWM Plan showing final hydrology, Identification of all storm water controls with summary calculations, delineation of adequate outfalls, zones of influence, required mitigation, and structural details and specifications as required Yes ___ No ___ N/A ___
- C. Digital Copy of final hydrologic and hydraulic models Yes ___ No ___ N/A ___

(seal)	<p>I certify that this Final Storm Water Management Plan, including this checklist, required attachments, and additional comments, was prepared under my responsible supervision and that the information presented on this checklist and attachments is correct to the best of my knowledge. I also understand that an acceptance of this plan by the Town does not waive any Town standards or requirements unless a specific waiver request has been submitted and approved.</p> <p>Signed _____ Date _____ Print Name: _____ PE No _____</p>
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Variance Procedure –Storm Water Management Design Manual

Good engineering practice and practical considerations are necessary when developing storm water management plans and preparing construction drawings for specific projects. The criteria in this manual cannot cover every possibility.

The closer the criteria are followed, the more likely the plan or drawing will be approved and the construction accepted. For those situations where varying from the criteria is warranted, a variance process is described below.

Submit variance request in writing on the Request for Variance from the Town/City – Storm Water Form (CT-7) as early as possible. The variance request must include the following:

- The specific criteria that you want to vary.
- Why the criteria needs to be varied.
- How the basis for the criteria will still be satisfied or why the criteria is not applicable.
- Indicate if there are no criteria for the proposed analysis, design, or feature in this manual.
- Appropriate technical information supporting the variance request, such as calculations, excerpts from the drainage or design plan, and/or construction drawings.

Note: Submittals with insufficient technical information to support the variance request will be returned without review.

The town will either approve or reject the variance in writing on the variance request form. If it is rejected, a written explanation will be provided.

REQUEST FOR VARIANCE – STORM WATER – FORM CT-7

Submitted by: _____ Phone: _____ Email: _____

Company: _____ Date: _____

Proposed Project Description

Name: _____

Type: _____

Location: _____ (include map)

Existing Condition (show information on map or drawing)

Existing Site: _____

Existing Right-of-Way: _____

Topography: _____

Other Pertinent Data Related to Variance Request:

Variance Request

Specific criteria you want to vary: _____

Explain why the criteria needs to be varied or is not applicable: _____

Explain how the basis for the criteria will be satisfied: _____

List attachments supporting variance request (preliminary design report excerpt, construction drawings, calculations, photographs, map, etc.):

Town/City fills in this area

Date	Reviewer	Dept./Section	Action Taken

Justification of Decision: _____

Approval of Final Decision: _____ Date: _____



North Central Texas
Council of Governments

environment & development

Certificate of Completion

Training & Exam

**Stormwater Management
BMP Maintenance & Post-Construction Inspection**

Charlie Wright

attended training presented by

Dr. William Lord and Bill Hunt of North Carolina
State University and Stormwater Edu

April 28-29, 2016



Venue provided courtesy of the TX A&M AgriLife Extension of Dallas

Stormwater Illicit Discharge Complaint Log							
Contact Information for Complainant		City Staff		Dates		Location of Illicit Discharge	Comments
Name	Phone Number	Received Call	Inspector	Received Call	Resolved		
Joe Smith	(555) 123-4567	Kate Brown	Devin Shields	1/1/2016	1/1/2016	123 Main Street (near Gotcher Avenue)	Oil Spill, See Storm Water Inspection Form, Report ID: 2016-01



Stormwater Inspection Form

Type of Inspection:

- Illicit Discharge Construction Site Stormwater Outfalls/Dry Weather
 Stormwater Outfalls/Post Storm Municipal Operation

Report ID (Yr-ID#):	Report 14-07-01		
Property Owner's Name:	Town of Double Oak		
Address:	320 Waketon Rd		
City:	Double Oak		
Phone:	972-539-9464		
Community:			
Subwatershed:			
Inspector's Name:	Charles Wright		
Discharge Description:	No discharge		
Corrective Actions:	N/A		
Conversation:	N/A		
Investigator 1:	Charles Wright		
Investigator 2: (if applicable)	N/A		
Warning Citation Issued	N/A		
Citation Issued	N/A		
Citation Number: (if applicable)	N/A		
Signature(s):	Charles Wright		
Additional Notes:	Inspected Town of Double Oak facilities and found no illicit discharges or other issues.		
Resolve Date:	07-01-16		
Files:	TCEQ: MS4 - Town Facility Reports		
Photo Locations:	None taken		

Town of Double Oak - SWMP Summary Table

BMP Description	Permit Year	Responsible Party
BMP NO. 1 - Public Education and Outreach		
<u>BMP 1.1 - Distribute Stormwater Educational Material</u>		
No action	1	Public Works Director
Distribute stormwater education material targeting residents and visitors	2-5	Public Works Director
Distribute stormwater education material targeting public service employees	2-5	Public Works Director
Distribute stormwater education material targeting businesses, commercial and industrial activity	2-5	Public Works Director
Distribute stormwater education material targeting construction site personnel	2-5	Public Works Director
<u>BMP 1.2 - Stormwater Message(s) with Links on Town of Double Oak Website</u>		
No action	1	Information Technology Manager and Public Works Director
Maintain webpage	2-5	Information Technology Manager and Public Works Director
Make Town SWMP available for viewing on stormwater webpage	1-5	Information Technology Manager and Public Works Director
Post "Fact Sheets"(stormwater pollution prevention)	2-5	Information Technology Manager and Public Works Director
<u>BMP 1.3 - River/Stormwater System Volunteer Cleanups</u>		
Perform citizen volunteer clean-up	1-5	Public Works Director
<u>BMP 1.4 - Display Stormwater Management Program on Town Website for Public Review and Comment</u>		
Display SWMP on Town website	1-5	Information Technology Manager and Public Works Director
Monitor email/similar outlet of comments on SWMP webpage and methods to address community comments	1-5	
MCM NO. 2 - Illicit Discharge Detection and Elimination		
<u>BMP 2.1 - Implement Town Ordinance and Enforcement Procedures to Prohibit and Remove Illicit Discharges</u>		
Review current Illicit Discharge ordinance	1	Public Works Director
Research other municipality ordinances	2	Public Works Director
Prepare draft ordinance	3	Public Works Director
Adopt revised ordinance	4	Public Works Director
Enforce updated ordinance	5	Public Works Director
<u>BMP 2.2 - Visual Inspection of Selected Stormwater Outfalls During Dry Weather</u>		
Enforce current ordinance	1	Town Engineer and Public Works Director
Research other municipality procedures and forms	2	Town Engineer and Public Works Director
Prepare a dry weather inspection procedure and form	3	Town Engineer and Public Works Director
Update/revise the current criteria for ranking stormwater pollution potential of stormwater outfalls	4	Town Engineer and Public Works Director
Implement dry weather screening program	5	Town Engineer and Public Works Director
<u>BMP 2.3 - Development of Storm Sewer Map Showing All Outfalls and Names of Waters of the United States</u>		
No Action	1	
Gather Record Drawings with Storm Line locations	2-3	Town Engineer and Public Works Director
Develop draft electronic and paper maps (stormwater outfalls and document results)	4	Town Engineer
Continue to update electronic and paper stormwater outfall location map with receiving water	5	Town Engineer
<u>BMP 2.4 - Educate To Employees, Business, and the General Public (Hazards Associated With Illegal Discharges to the System)</u>		
Research Public Education Material	1-2	Public Works Director
Distribute stormwater material target at Residents and Visitors	3-5	Public Works Director
Distribute stormwater material target at public service employees	3-5	Public Works Director
Distribute stormwater material target at businesses, and commercial activities	3-5	Public Works Director

Town of Double Oak - SWMP Summary Table

BMP Description	Permit Year	Responsible Party
BMP NO. 3 - Construction Site Runoff Controls		
<u>BMP 3.1 - Implement/Maintain Ordinance and Enforcement Mechanism to Require Erosion and Sediment Control at site>1 Acre</u>		
Enforce current ordinance	1	Town Engineer and Public Works Director
Review current ordinances	2	Town Engineer and Public Works Director
Submit Draft of ordinance revisions	3	Town Engineer and Public Works Director
Implement and update as necessary the final ordinance requiring waster, erosion, and sediment controls at construction>= 1 acres	4	Town Engineer and Public Works Director
Enforce updated ordinance until end of permit	5	Town Engineer and Public Works Director
<u>BMP 3.2 - Require Submittal of Construction Site SWPPP for Review by Town Staff</u>		
Review construction plans with current check list	1	Town Engineer and Public Works Director
Review construction plan checklist	2	Town Engineer and Public Works Director
Submit draft construction plan checklist with proposed revisions	3	Town Engineer and Public Works Director
Implement and update as necessary the new construction site plan review checklist that considers potential impacts of water quality	4	Town Engineer and Public Works Director
Continue review of all Construction SWPPPs to ensure compliance with Town ordinance until end of permit term	5	Town Engineer and Public Works Director
<u>BMP 3.3 - Implement Procedures for Construction Site Inspection of Runoff Controls</u>		
Inspect construction site per current procedures	1	Public Works Director
Research other municipality inspection procedures and forms	2	Public Works Director
Review and revise as necessary the construction site inspection procedures	3	Public Works Director
Implement revised construction site inspection procedures	4-5	Public Works Director
<u>BMP 3.4 - Train Town Inspectors in Conducting Proper Site Inspections</u>		
Conduct Inspections based on current procedures	1	Public Works Director
Research education material	2	Public Works Director
Training Town inspectors in procedures for ensuring construction site has required stormwater runoff controls	3-5	Public Works Director
<u>BMP 3.5 - Implement mechanism for contractor Comment and Procedures for Comment Consideration in regard to Runoff Control</u>		
Continue to maintain email where the community can discuss stormwater issues	1-5	Public Works Director
Address comments or questions as necessary	1-5	Public Works Director
BMP NO. 4 - Post Construction Stormwater Management in new Development and Redevelopment		
<u>BMP 4.1 - Create and Distribute Educational Materials for Area Developers regarding Post-Construction Stormwater Controls</u>		
No Action	1	
Research education material	2	Public Works Director
Determining Appropriate material to distribute	3	Public Works Director
Educational material will be distributed with applicable building permits	4-5	Public Works Director
<u>Bmp 4.2 - Post- Construction Stormwater Management in New Development and Redevelopment</u>		
No Action	1	
Research education material	2	Public Works Director
Determining Appropriate material to distribute	3	Public Works Director
Educational material will be distributed with applicable building permits	4-5	Public Works Director
BMP NO. 5 - Pollution Prevention and Good Housekeeping		
<u>BMP 5.1 - Assess Municipal Properties for Appropriate Stormwater Pollution Prevention Control</u>		
Conduct annual inspection of town hall property	1-5	Public Works Director