



**NOTICE TO ALL PERSONS SUBMITTING ACCESS APPLICATIONS OBTAINED
FROM THE INTERNET.**

For access location and addressing purposes, you are required to post a green flag at the exact location of your proposed or existing access. These green flags may be obtained at no charge from the Delta County Planning Department: located at 501 Palmer Street, Suite 115 Delta, Colorado 81416, when the application is submitted.

A GREEN FLAG must be posted in order for this application to be processed.

If you are unable to visit our office to obtain a flag, please call 970-874-2110 to request that this application be mailed to you.



DELTA COUNTY, COLORADO

PLANNING AND COMMUNITY DEVELOPMENT

COUNTY COURTHOUSE • 501 PALMER STREET • SUITE 227 • DELTA • COLORADO • 81416-1764

www.deltacounty.com

planning@deltacounty.com

Phone: (970) 874-2110 Fax (970) 874-2500

Development Application Process & Procedure

Development Application Checklist

(Please use this CHECKLIST to be sure that your application is complete before submitting to the Planning Department)

- All Applicant and Owner Information, Property Description, Parcel Number (PID) and Required Distance Measurements.
 - A Legible Site Sketch with all requirements included. If this access is on a lot within any Subdivision, a Recorded Plat MUST be attached with the proposed access shown on Plat
 - Owner and Applicant's Signatures (unless same)
 - A copy of the Recorded Warranty Deed showing ownership.
 - Fees: Payable to: DELTA COUNTY
 - Access only: \$75.00 + \$300.00 Development Deposit (Two Separate Checks)
 - Address only: \$50.00 (Attach copy of the approved, signed, access permit, if applicable)
 - Access/Address: \$125.00 + 300.00 Development Deposit (Two Separate Checks)
 - OWTS (Septic) -New: \$623.00 Payable to: DELTA COUNTY HEALTH DEPT. (Separate Check)
 - Development Deposit is refunded after OWTS completion and final approval
- NOTE: An Approved, Signed Access Permit Is Required Prior To Addressing. An Address Is Required Prior To Obtaining An Approved Final Septic Permit.**
- Place the GREEN FLAG at the physical location of your driveway site.

1. When the Application and fees have been submitted to the Planning Department, the referral agencies will have ten (10) working days to gather their initial comments.
2. After the referral agencies have submitted their comments, an unsigned Access Permit will be mailed to you. The unsigned permit with the Road and Bridge instructions indicate if the access location has been approved, approved with conditions, or denied. Once you have received the unsigned permit, you may begin constructing the access in accordance with any stated conditions.
 - Construct the access
3. After the access has been constructed, you will need to contact the Road & Bridge Foreman to request a final inspection of the access. The Foreman's contact Information is located on the unsigned permit.
 - Contact Road & Bridge Foreman to schedule a final inspection
4. When the final inspection has been completed and the access permit has an approval signature by the Road and Bridge Foreman, the GIS Department will issue an address (if you have applied for one). This process may take up to two weeks. Once an address is issued, the OWTS process may be finalized.
5. Road address signs are ordered quarterly by the GIS Department and may take up to four months to be placed.



**DELTA COUNTY DEVELOPMENT RESOURCE CENTER
DELTA COUNTY PLANNING DEPARTMENT**

501 Palmer Street
Delta, Colorado 81416
Phone: (970) 874-2110 Fax: (970) 874-2500
www.deltacounty.com planning@deltacounty.com

DP #: _____
R&B: _____
Received: _____

DEVELOPMENT APPLICATION

- 1. Access \$75.00 + Deposit (Separate checks to: **DELTA COUNTY**)
(\$300.00 Deposit- returned after all three processes have final approvals) Date Completed _____
- 2. Address \$50.00 (See Fees in Application Process and Procedure) Date Completed _____
- 3. On-Site Wastewater Treatment System (OWTS)
(Separate check payable to: **DELTA COUNTY HEALTH DEPARTMENT**)

DCEH USE:
App#: _____
Date: _____

↓REQUIRED INFORMATION↓

Property Owner _____
(AS RECORDED WITH DELTA COUNTY)

MAILING ADDRESS _____
(Street) (City) (State) (Zip)

HOME PH. _____ WORK _____ CELL _____

EMAIL ADDRESS: _____

Applicant's Name (if different than Property Owner) _____

MAILING ADDRESS _____
(Street) (City) (State) (Zip)

HOME PH. _____ WORK _____ CELL _____

EMAIL ADDRESS: _____

LEGAL DESCRIPTION OF THE PROPERTY

Site Address: (If applicable) House Number _____ Road Name _____

The Parcel Number and Legal Description can be obtained from your Deed, Tax Notice, or by calling the Delta County Assessor's Office, (970) 874-2120 or website: www.deltacounty.com

A part of the (1/4 Section) _____, Section _____, Township _____, Range _____ 6th P.M. or N.M. P.M. or Ute P.M.

SUBDIVISION (Name, Lot#, Block #) _____

(ATTACH COPY OF THE RECORDED PLAT)

PARCEL NUMBER (PID#): _ _ _ _ - _ _ _ - _ _ _ _

I hereby apply for the above-indicated permits on the above-described property. I understand the foregoing provisions of the Regulations adopted by Delta County and agree to perform the development in accordance with these regulations. The undersigned hereby certifies that all statements and documentation contained herein are true and correct to the best of his/her knowledge.

Property Owner's Signature Date

Applicant's Signature Date



Delta County Planning Department
 501 Palmer Street, Suite 227
 Delta, Colorado 81416

**DELTA COUNTY
 DEVELOPMENT RESOURCE CENTER**

DP#: _____
R&B: _____
Receipt date _____

****A copy of the RECORDED WARRANTY DEED IS REQUIRED with this application****

1. What road are you accessing from? _____
2. How many residences or businesses will use the proposed access? (Show all on Site Sketch) _____
3. Are there accesses besides the proposed access entering this property? (Show all on Sketch) Yes No
4. Measure the distance from the center point of your access or proposed access to the center point of your closest neighbor's driveway. DISTANCE: _____
5. Is your closest neighbors driveway located to the: EAST WEST NORTH SOUTH of your driveway?
6. Is your closest neighbor's driveway on the SAME or OPPOSITE side of the road as your driveway?
7. Measure the distance from the center point of your access or proposed access to the center point of nearest road intersection. DISTANCE: _____
8. What is the name of the nearest intersecting road _____
9. Is the County road intersection located to the: EAST WEST NORTH SOUTH of your driveway?
10. Does the driveway cross the property of another person or entity (City/ Government)? Yes No
IF YES, a copy or copies of the easement (s) /plat (s) must accompany this application and may be found with the title documents or obtained from the Delta County Clerk and Recorders Office.

DELTA COUNTY ADDRESS APPLICATION (Fill Out Only if You Need an Address)

An address is assigned to units. A unit is usually one livable residence, a business, utilities or a utility structure, temporary facilities and/ or buildings other than an auxiliary structure.

REQUIRED SUBMITTALS:

Attach a copy of permit to access Delta County Road____, permit to access Colorado State Highway____, a permit to access a "public road"____ (usually a non-County maintained subdivision road), or evidence that a land locked parcel has legal right to use driveway that traverses private land to road_____.

I hereby apply for address for a _____ (residence, business, utilities only, or other, please explain)
 The purpose of the application is to _____ (establish a physical address, move access, verify address, or delete address)

I understand that if the unit is not placed or **constructed within 12 months** from the address assign date, the property reverts to vacant status, the address will be revoked, and the property owner must re-apply.

SITE SKETCH

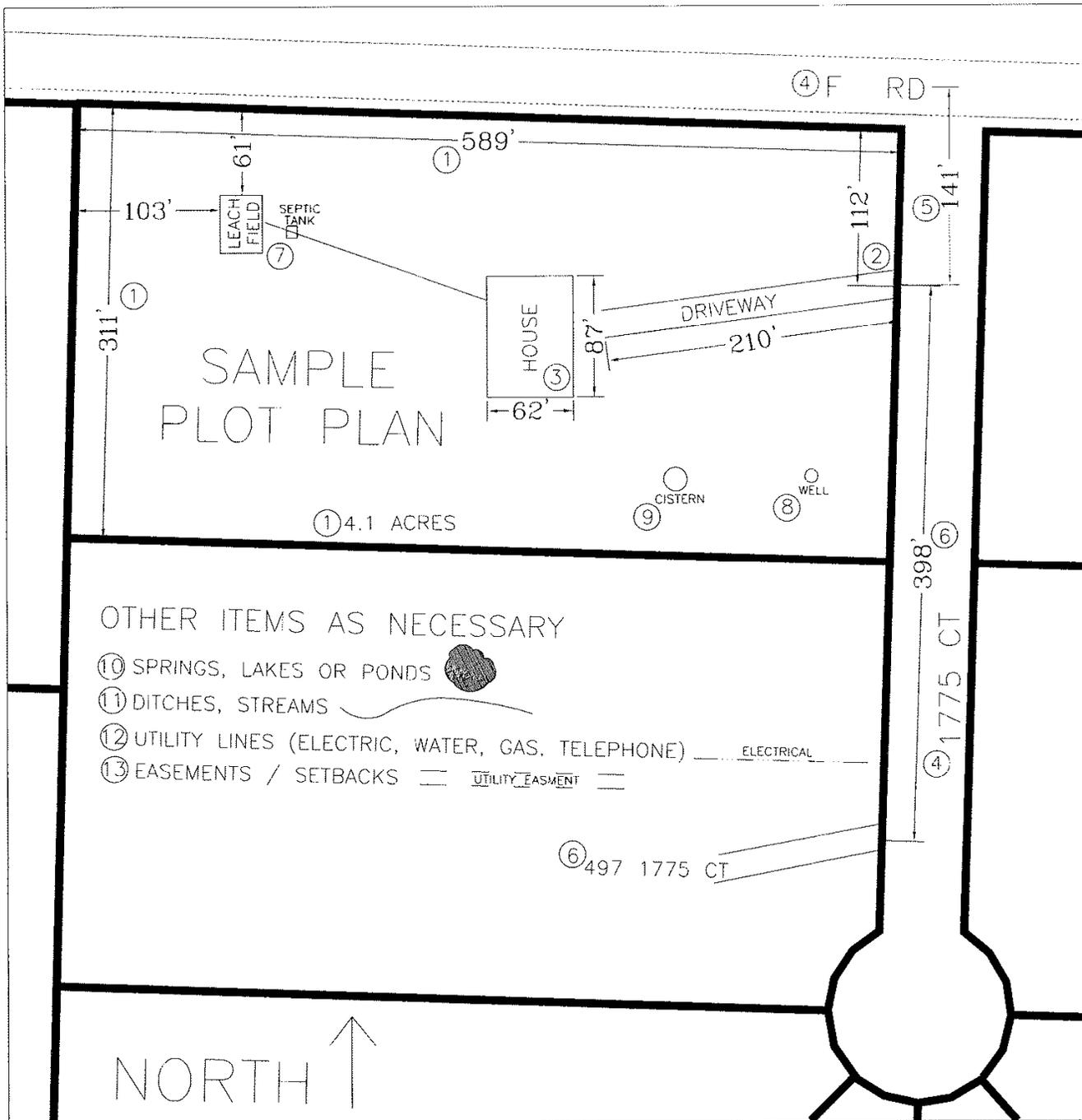
DP#: _____

AN ACCURATE SITE SKETCH OR PLAT FOR SUBDIVISION IS REQUIRED FOR ALL PERMIT APPLICATIONS SUBMITTED

Please draw and label your property to the best of your ability on the space provided. The features to be included in the site sketch are listed below. Some of the features may not exist or be applicable to your development. Try to be as inclusive as possible. SEE EXAMPLE ON BACK OF THIS SHEET.

1. Property boundaries, acres, length, width	6. Distance between access and nearest neighbor's access (Include neighbors address)	11. Ditches
2. Proposed and existing accesses	7. Proposed/ existing septic and leach field location	12. Utility lines (electrical, water, gas, & telephone)
3. Proposed/ existing Buildings, Residences & Commercial buildings currently using or that will use this access	8. Wells	13. All Easements (attach recorded documentation and plat)
4. Label all County Roads.	9. Cisterns	
5. Distance between access & nearest intersecting road	10. Springs/ Ponds/ Lakes	





**Access & Address Disclaimer
Delta County**

FROM WHAT COUNTY ROAD OR NAMED ROAD IS THE PROPOSED ACCESS

(_____)

I, _____, acknowledge that I have applied
for an **Access** and/or an **Address** to the property described and I further understand:

- The location of my requested access point may be approved, disapproved or modified for public safety.
- I agree to construct my **access** at the approved location. If, for any reason, I choose to construct or have the **access** built in another location from the one approved, I will, if requested by Delta County, re-move, relocate or rebuild the **access** and I understand my **address may change** as a result, additionally;
- My **address** may be changed if the actual constructed **access** is different from the approved location. I agree to pay all required fees.
- I agree to construct my **access** to Delta County Standards.
- If my **access**, as granted, is on a parcel or lot currently part of a Delta County subdivision process, I agree to relocate my **access** and **re-address** my property as may be required as a result of a final and recorded subdivision plat. I agree to pay the required fees.
- I understand this application will expire one year from the date of submittal unless I have contacted the Planning Department, in writing, to request an extension. Once the application expires, I agree to submit a new application and current fees to continue with this proposal.

Date: _____

Property Owner/Applicant's Signature



**DELTA COUNTY
DEPARTMENT OF HEALTH & HUMAN SERVICES
INFORMATION FOR
ON-SITE WASTEWATER TREATMENT SYSTEMS PERMIT**

DCEH USE
App#: _____
Date: _____

INSTRUCTIONS:

1. Fill out Sections 1&2 below and include the septic and leach field location on the Site Sketch.
2. Fill out all applicable information completely. Return the completed application with fee to the Delta County Planning Department, 501 Palmer St., Rm. 115, Delta, CO, 81416.
3. After you have submitted the application contact a registered professional engineer to conduct a site evaluation and design an onsite wastewater treatment system.
4. Submit the design and site plan for review and approval to the Delta County Health Department, 255 W. 6th St., Delta, CO 81416, Ph. 970-874-2165
5. The Health Department will issue a permit to construct and install the system after review and approval of the site and design.
6. A final inspection must be conducted by the Health Department and approval granted by the Health Department of the installation prior to backfill and use of the OWTS.

SECTION 1: Please complete the following information.

1. Is the proposed house and/or system located within 200' of a creek or river?
 YES _____ NO _____ (select one)
 (FEMA flood plain information can be obtained from the Health Department)
2. Are there any wells within 200' of any part of the proposed system? YES _____ NO _____ (select one)
 If yes, indicate the depth(s) of the well(s) _____ feet.
3. Approximate distance to the nearest community sewer system _____
4. Was an effort made to connect the community sewer system? YES _____ NO _____ (select one)
5. Please list your Excavator/ Contractor's name _____ Ph. _____
6. ACREAGE _____ LENGTH _____ WIDTH _____ of property.

SYSTEM	USE	WATER SUPPLY
<input type="checkbox"/> New <input type="checkbox"/> Replace old system <input type="checkbox"/> Repair (Permit# _____) <input type="checkbox"/> Alteration (Please Explain) _____ <input type="checkbox"/> Vault <input type="checkbox"/> Privy <input type="checkbox"/> Other (please Explain) _____	<input type="checkbox"/> Year around <input type="checkbox"/> Seasonal (Indicate # days/year) <input type="checkbox"/> Non-Domestic	<input type="checkbox"/> Cistern <input type="checkbox"/> Well (give depth) _____ <input type="checkbox"/> Spring <input type="checkbox"/> Surface <input type="checkbox"/> Public (give name of supply) _____ _____

SECTION 2: Please check the following that apply:

SINGLE FAMILY	MULTI-FAMILY	COMMERCIAL
<input type="checkbox"/> Frame <input type="checkbox"/> Manufactured Home _____ # of Bedrooms <input type="checkbox"/> Basement Plumbing _____ # of People _____ # of Bathrooms	_____ # of Units _____ # of Bedrooms per unit <input type="checkbox"/> Basement Plumbing _____ # of People _____ # of Bathrooms	Type of Business _____ Maximum sewage flow rates: _____ # of Employees _____ Building occupancy _____ # of Bathrooms _____ Toilets# _____ Sinks# _____ Urinals# _____ Bath# _____ Showers# _____ Lavatories# _____ Washracks# _____ Other# _____

OFFICE USE ONLY
SITE INSPECTION REPORT

DCEH USE

App#: _____

Date: _____

1. SCS soil type_____

2. Depth of bedrock_____ Depth of groundwater_____

3. Estimate high seasonal water table_____

4. Limiting factors_____

5. Flood plain information & map #_____ Flood plain permit required? _____

6. Site Inspection and soil test pit or percolation test verified by;

SITE INSPECTED BY_____ DATE_____

7. Professional Engineer design received and reviewed by;

REVIEWED BY_____ DATE_____

8. Design changes required and P.E. notified;

BY_____ DATE_____

Office Use Only

DP# _____

SITE INSPECTED BY _____ DATE _____

PLANNING DEPARTMENT INFORMATION

1. Number of occupied mobile homes, RV's on the property:

2. Number of occupied dwellings on the subdivision lot:

3. Building setbacks closer than 25' from property boundary:

4. Describe any business on the property that may require a Specific Development Permit:

5. Describe possible building envelope violations on the subdivision lot:

Referral to Planning Department by:

Name

Date

OWTS FEE SCHEDULE

PROCEDURE	December 8, 2010
Soil & Site Evaluation 2 **	\$300.00
New OWTS Installation 1	\$623.00
Total Replacement- OWTS 1	\$523.00
Tank Replacement 1	\$223.00
Absorption Bed Replacement 1 Under 5 Years Old	No Fee
Absorption Bed Replacement 1 -Over 5 Years Old -Without Permit on File	\$523.00
Absorption Bed Replacement 1 -Over 5 Years Old -With Permit on File	\$523.00
Alteration of an existing system 1	\$323.00
Additional Site Visits 4 - After Three Visits	\$150.00
Loan Approval 3	\$350.00
Loan Approval 3 New Installation/ Unused	\$75.00
Phase II Loan Approval Inspection 3	\$600.00
Additional Water Samples 4	\$105.00
Minor Repairs 4	No Fee
New Grey Water System 1	\$623.00
New Non-Discharging System 1 - Vault, Vault Privy	\$373.00
New Pit Privy 1	\$373.00
Renew an Expired Permit 4	\$150.00
Change Ownership of a Permit 4	\$150.00
Subdivision Review 5 - Four Hours Included - 35.00 per hour afterwards	\$250.00

KEY

- 1- Regular OWTS Application
 2- Soils and Site Evaluation Application
 3- Water and/or Sewage Disposal Inspection Application

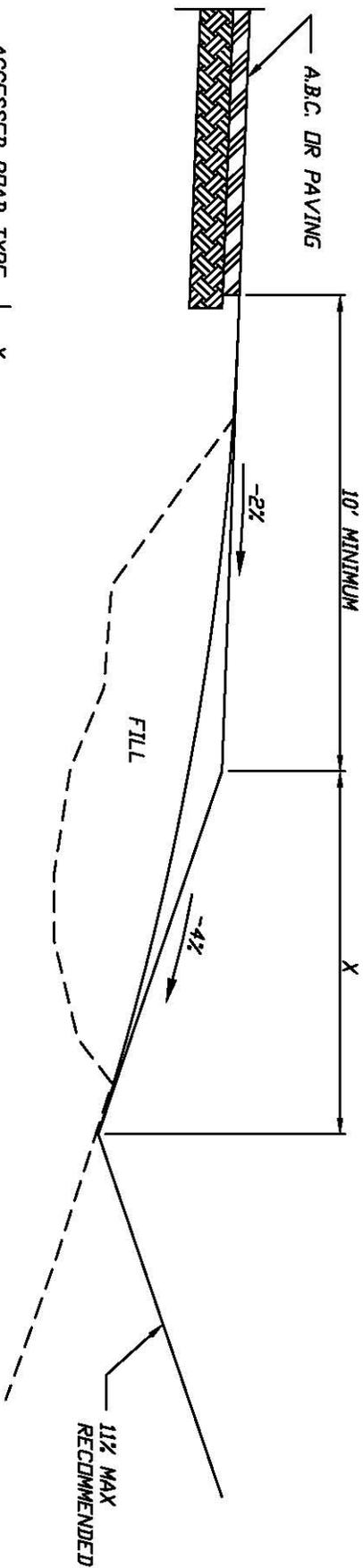
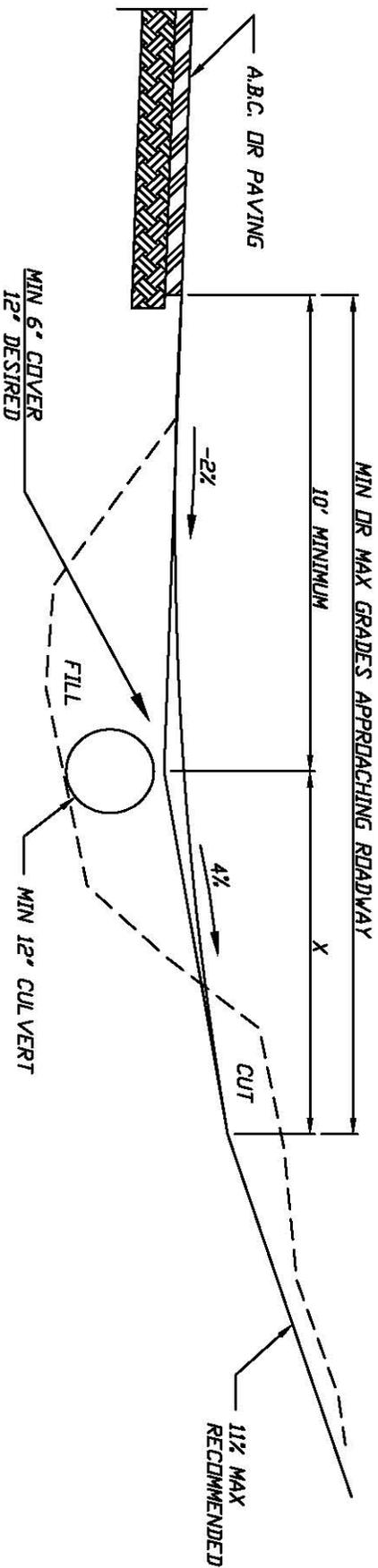
- 4- Does Not Need an Application
 5- The Inspectors Take Care of This

** A Soils and Site Evaluation (S/SE) can be converted to a New OWTS Permit. The fee will be the difference of the amount paid for the Soil Test/ Site Evaluation and the new OWTS Permit fee.
 For Example: \$323.00 (new application fee) + (\$300.00 ST/SE previously paid) = \$623.00

**DELTA COUNTY
PROCEDURE FOR OBTAINING AN ACCESS PERMIT**

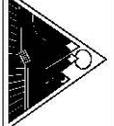
GENERAL PROVISIONS

1. An access permit must be obtained at least 48 hours prior to the planned commencement of construction. If a road closure is requested, the permit must be obtained seven (7) days prior to the planned commencement of construction.
2. Pursuant to C.R.S.43-2-147, no person shall construct any driveway having vehicular access to or from any County road, or across property adjoining a County Road without an access permit issued by Delta County.
3. The applicant shall submit construction plans, specifications and a written schedule covering the general sequence and staging of the work to be performed. A sketch will suffice for minor installations.
4. An applicant may be required by the Board to conduct traffic counts or provide an engineered design or other studies to assist them in their decision process. All such work shall be done at the applicant's expense.
5. If it is determined during construction that the installation cannot or will not be installed as planned, the Road & Bridge Department will be notified immediately and a new permit will be issued and a fee adjustment made as necessary.
6. Adequate warning signs, barricades, lighting, flags and other devices shall be utilized throughout the period of work.
7. Any person who violates any provision of the Delta County Access and Utility Code shall be guilty of a class 2 petty offense and upon conviction thereof shall be punished by a fine not to exceed the amount specified by C.R.S.30-15-402.
8. In the event of non-compliance with the permit, the applicant shall be notified to repair defects immediately. Failure by the applicant to repair these defects within the noticed time limit shall allow the County to make such repairs at the applicant's expense.
9. All contractors performing work pursuant to this permit shall warrant his/her work for a period of (1) year from the date of completion and acceptance thereof.
10. With the exception of extensive road frontages, access openings shall be limited to one (1) opening per each legally established lot or parcel of land. Whenever possible one (1) opening shall serve two (2) adjacent parcels.
11. One way access shall have a width of twelve feet (12') to eighteen feet (18'). Sixteen feet (16') to twenty four feet (24') of width shall be used for any two-way access. (See Road Construction Appendices for other specifications)
12. The access approach to a County road shall be at an angle of ninety degrees (90) +- five degrees (5)
13. No access shall have a turning radius of less than twenty feet (20')
14. The grade of an access shall slope downward and away from the road surface at the same rate as the normal shoulder. Approach grades shall be limited to one per cent (1%).
15. At their own expense, the applicant may be required to include a twelve inch (12") minimum diameter or larger galvanized culvert, hydrological studies, the use of controlled flow retention pond, storm sewer hook-up or other drainage improvements as a condition of the permit.
16. The occupant and the owner of the property serviced by the access approach shall be responsible for maintenance of the access approach beyond the roadway shoulder.



ACCESSED ROAD TYPE	X
LOCAL SERVICE	10'
LOCAL ACCESS	20'
COLLECTOR	20'
ARTERIAL	30'

DELTA COUNTY
 OFFICE OF THE COUNTY ENGINEER
 501 PALMER STREET DELTA, CO 81416

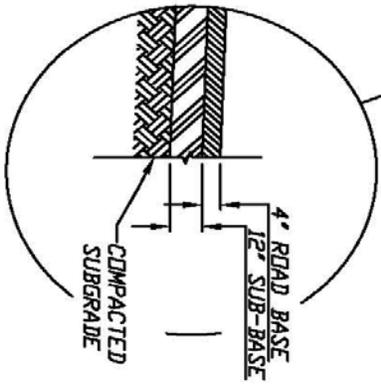
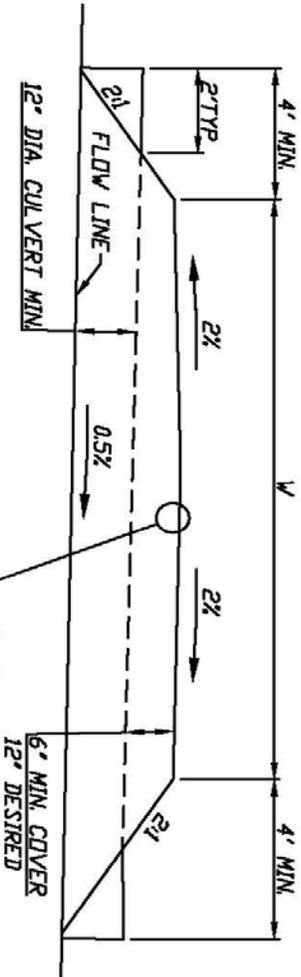
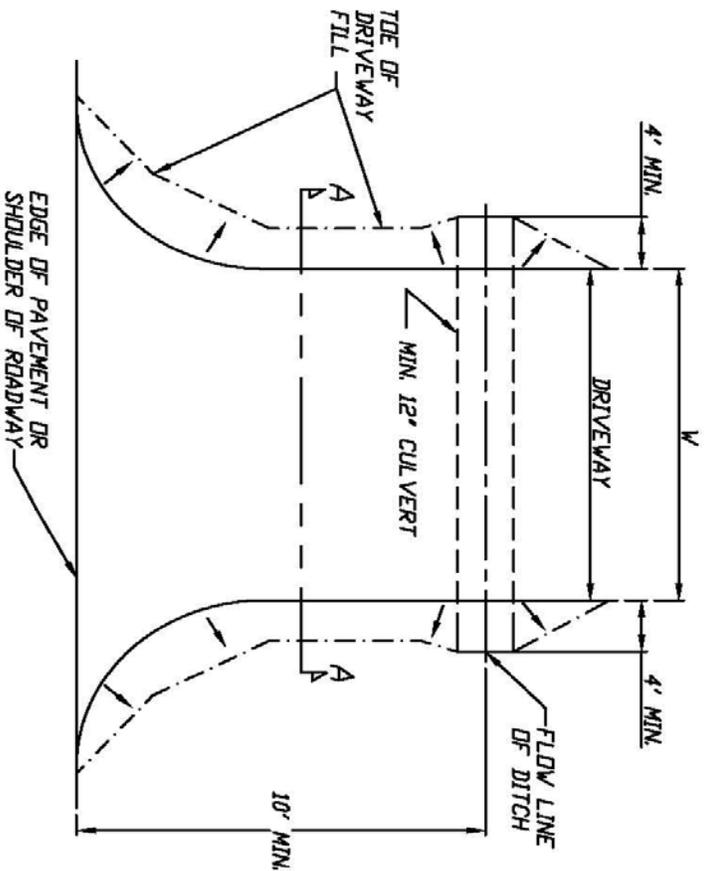


DRIVEWAY PROFILES
 PUBLIC USE - PRIVATELY MAINTAINED
 DELTA COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS

BY	REVISION DESCRIPTION	DATE
RJB	REVISION	11/17/08
RJB	REVISION	11/17/08

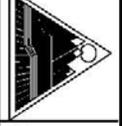
SCALE: NOT TO SCALE
 DESIGNED: DELTA COUNTY
 DATE: 11/17/08
 DRAWN: RJB
 APPROVED FILE LOCATION: M:\ENGL\RD\ROAD\08\14\14495

RURAL DRIVEWAY WIDTHS		
USE	W MIN.	W MAX.
RESIDENTIAL	12'	18'
SHARED ACCESS	16'	24'
MULTI-FAMILY RESIDENCE	16'	24'
COMMERCIAL	16'	24'
INDUSTRIAL	24'	30'
AGRICULTURAL	16'	30'



NOTES:
 1. FOR DRIVEWAYS ALONG GRAVEL ROADWAYS, THE DRIVEWAY SHALL BE CARPED FROM THE ROADWAY EDGE TO THE PROPERTY LINE WITH CLASS 6 A.B.C. MIN. 6" DEPTH.

DELTA COUNTY
 OFFICE OF THE COUNTY ENGINEER
 501 PALMER STREET DELTA, CO 81416



RURAL DRIVEWAYS
 TITLE
 DELTA COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS

REV.	REVISION	DATE	SCALE	DESIGNED:	ITEM
1	ADDED	11/17/08	AS SHOWN	DELTA COUNTY	16
2	REVISION DESCRIPTION				

APPROVED FILE LOCATION: **16**



DELTA COUNTY, COLORADO HEALTH DEPARTMENT

DELTA COUNTY HEALTH BUILDING- 255 WEST 6TH STREET-DELTA-COLORADO-81416
PHONE 970-874-2165 FAX: 970-874-2175

INSTRUCTIONS FOR INSTALLATION OF ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS) IN DELTA COUNTY

Prior to construction, any person who intends to install a new on-site wastewater treatment system (formerly called an individual sewage disposal system) in Delta County shall obtain a permit from the Delta County Planning Department. If you are altering or repairing an on-site wastewater treatment system, you will need to contact the Delta County Health Department - Environmental Health Division (DCHD) and shall furnish all necessary information pertaining to the construction and installation of the system.

1. **Complete the Applications and return to the Planning Department along with the permit fees:** The Application must be filled out to the best of your ability along with the plot plan. If your lot was created by Subdivision or Subdivision exemption, provide a copy of the final plat. A copy may be obtained at the Delta County Clerk & Recorder. You must also provide an official county access and address for your building site. You can also apply for an access and address in the Delta County Planning Department. Prior to issuing a permit or making an appointment for a site inspection, *the applications and permit fees must be returned* to the Delta County Planning Department by mail or in person. **(This application expires in one (1) year, subject to renewal)**

2. **Registered Professional Engineer Design:** A registered professional engineer (RPE) is required by regulation to design all new OWTS in Delta County. Contact an engineering firm of your choice to conduct soils evaluation, to produce a site plan and create an installation design plan.

3. **Site Evaluation and Plan Review:** The RPE plans must be submitted to the Health Department for review. The Health Department will conduct an inspection of the site to verify the soils analysis and site suitability. Upon favorable review of the documents and site inspection, a permit will be issued by the Health Department for the system installation

4. **Permit Issued:** Only after a permit is issued may construction begin. The system must be installed according to the permit conditions and the RPE design. Any changes in the design or specified materials must be approved by the engineer.

5. **Final Inspection:** The DCDH&HS-EH Division must be notified at least 24 hours prior to backfilling so that a final inspection of the system can be conducted. The entire system, including building sewer, septic tank, effluent line from the tank and absorption system, must be completed and left uncovered for inspection except that the pipes may be "bedded-in". If the system is not installed according to the regulations, final approval shall be withheld until the corrections are made.

Operations: Only after final approval of the installation may occupancy be permitted. The owner is responsible to see that the system is maintained and operated in good working order and in compliance with the requirements of the permit. The DCHD-EH Division may require proof of cleaning and maintenance at any time.

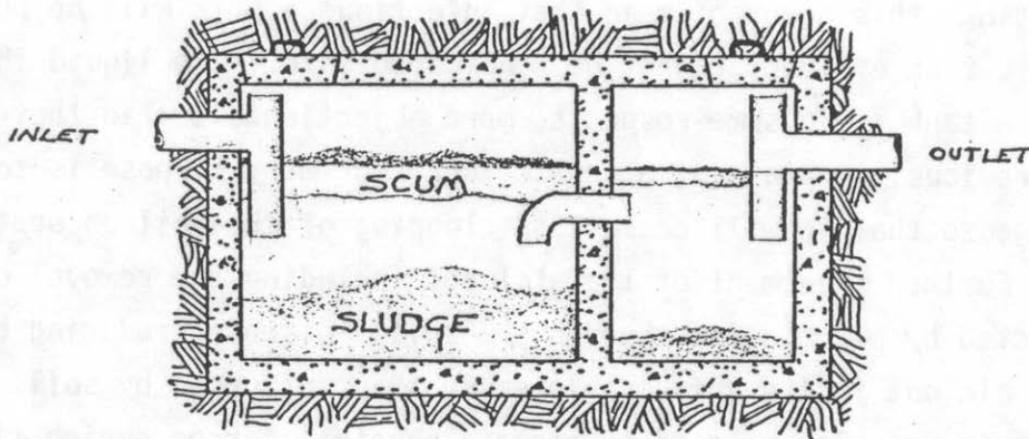


DELTA COUNTY, COLORADO
DEPARTMENT OF HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH DIVISION

255 WEST 6TH STREET, DELTA, CO 81416
PHONE: (970) 874-2165 FAX: (970) 874-2175

ONSITE WASTEWATER TREATMENT SYSTEM FACT SHEET

The majority of the rural residences in this county are not located so that they could conveniently hook up to a public sewage disposal system. Septic tank systems are the most commonly used type of individual sewage disposal. This system consists of two basic parts, the septic tank and soil absorption system.



The purpose of a septic tank is to provide for the removal of solids found in household wastes. It acts as a large settling tank and therefore conditions the sewage so that it may be more readily percolated into the subsoil of the ground. Thus, the most important function of a septic tank is to provide protection for the absorption ability of the subsoil.

Septic tanks MUST be cleaned before too much sludge or scum is allowed to accumulate. The heavier sewage solids settle to the bottom of the tank, forming a blanket of sludge. The lighter solids including fats and greases, rise to the surface and form a layer of scum. If either the sludge or scum builds up and approaches too closely to the tank outlet, particles will be scoured into the disposal fields and clog the soil absorption system. Eventually, when this happens, liquid may break through to the ground surface and the sewage may back up in plumbing fixtures. When a disposal field is clogged in this manner, it is not only necessary to clean the tank, but it also may be necessary to construct a new disposal field.

There are wide differences in the rate that sludge and scum will accumulate from one tank, to the next. A family of eight with a garbage disposal will need to have their tank pumped more often than a family of three. A modern designed septic tank serving an average sized family will need pumping on an average of once every 3-5 years.

Grease traps are not ordinarily considered necessary on household sewage disposal systems. The septic tank capacities required by today's regulations are sufficient to receive the grease normally discharged from the home.

Soaps, detergents, bleaches, drain cleaners, or other material as normally used in the household will have no appreciable adverse effect on the system. However, as both the soil and essential organisms might be susceptible to large doses of chemicals and disinfectants, moderation should be the rule.

Toilet paper substitutes should not be flushed into a septic tank. Paper towels, newspaper, wrapping paper, rags, and sticks, etc..., may not decompose in the tank, and are likely to lead to clogging of the plumbing and disposal system.

Contrary to popular belief, septic tanks do not accomplish a high degree of bacteria removal. Although the sewage undergoes treatment in passing through the tank, this does not mean that infectious agents will be removed; hence, the liquid discharged from the tank (the effluent), cannot be considered safe, and in some respects, is more objectionable than the liquid that enters the tank. As previously explained, a septic tank's primary purpose is to condition the sewage so that it will cause less clogging of the soil absorption field.

Further treatment of the effluent, including the removal of pathogens, is effected by percolation through the soil. Disease producing bacteria will in time die out in the unfavorable environment afforded by soil. In addition, certain physical forces also remove bacteria during filtration. This combination of factors results in the eventual purification of the sewage effluent.

The first step in designing of a leach field system is to determine whether the soil is suitable for the absorption of septic tank effluent and, if so, how much area is required. To find out the above information, the rate at which the particular soil will absorb water has to be determined through a percolation test. When this rate has been determined, the size of the tank can be determined, and how many square feet of absorption field will be required to soak up the amount of water to be used by the occupants. For example, a family of eight with an automatic washer, garbage disposal, and dishwasher located in a tight clay soil will need a large leach field. In contrast, a family of three, no automatic machines and located in a very sandy, porous soil would need a much smaller leach field.

A properly sized, installed, and maintained septic system should give many years of service to its user.