APPROVED

CACHE COUNTY
COUNCIL MINUTES
SEPTEMBER 13, 2011

CACHE COUNTY COUNCIL
September 13, 2011

CACHE COUNTY COUNCIL MEETING
September 13, 2011

The Cache County Council convened in a regular session on September 13, 2011 at 5:00 p.m. in the Cache County Council Chamber at 199 North Main, Logan, Utah.

ATTENDANCE:

Chairman:	Jon White
Vice Chairman:	Craig "W" Buttars
Council Members:	H. Craig Petersen, Val Potter, Kathy Robison, Cory Yeates & Gordon Zilles.
County Executive:	M. Lynn Lemon
County Clerk:	Jill N. Zollinger
County Attorney:	James Swink

The following individuals were also in attendance: Janeen Allen, Clinton Aston, Zeb Atkinson, Tom Bailey, Laura Baker, Ilda Berge, David Black, Patti Brockman, Rand Chadwell, Clair Christiansen, Rosemary Christiansen, Tyler Clark, LaMar Clements, Daniel Cooper, Debra Cooper, Bryan Cox, Sallie Dance, Gail Dawson, Glenda Dawson, Clair Ellis, Sandy Emille, Karla Ferguson, Susan Flann, Darrel Gibbons, Jaydene Godfrey, Kendon Godfrey, Tyler Godfrey, Janet Hales, Issa Hamud, Layne Harris, Melinda Harris, Lanny Herron, Marsha Herron, Heidi Hodgson, Kaia Hodgson, W. Ralph Holt, Sharon L. Hoth, Lori Jorgensen, Rachel Kenley, Mark Koller, Kimberly Langley, Mayor Camille Larsen, Keith Larsen, Brett Mickelson, Heather Moller, Barry Myers, Kelli Myers, Dave Nielsen, Bruce Olenick, Rick Olsen, Frank Pearson, Janet Pearson, Natalie Phillips, Helen Rigby, David Salisbury, Annette G. Summers, Joe Ann Thompson, Mervin Thompson, Rick Williams, Colleen Woodward, Ruby Woodward, **Media:** Charles Geraci (Herald Journal).

OPENING REMARKS AND PLEDGE OF ALLEGIANCE

Council member Robison gave the opening remarks and led those present in the Pledge of Allegiance.

REVIEW AND APPROVAL OF AGENDA

Executive Lemon noted that a request to remove Item 7c – *Citizen Input-Don Dunbar* – had been received. Chairman White explained that Item 7b – *Citizen input on Landfill –Clair Christiansen/Kendon Godfrey* – would be moved under Item 10d – *Public Hearing-North Valley Landfill Rezone.*

ACTION: Motion by Council member Zilles to approve the amended agenda with Item 7c-*Citizen Input-Don Dunbar* – removed and Item 7b b – *Citizen Input on Landfill-Clair Christiansen/Kendon Godfrey* – moved under Item 10d – *Public Hearing-North Valley Landfill Rezone.* Yeates seconded the motion. The vote was unanimous, 7-0.

REVIEW AND APPROVAL OF MINUTES

ACTION: Motion by Council member Yeates to approve the minutes of the August 23, 2011 Council Meeting as written. Potter seconded the motion. The vote was unanimous, 7-0.

REPORT OF THE COUNTY EXECUTIVE: M. LYNN LEMON

APPOINTMENTS: Executive Lemon presented the following to be appointed as members of the Road Capital Improvement Advisory Board:

Road Supervisor Darrell Erickson
Director Josh Runhaar
Engineer Lynn Zollinger
Attorney James Swink
Executive Lynn Lemon

The committee will prioritize county roads, present their findings to the Planning Commission and then bring it before the County Council.

Chairman White said he would like to have someone from the Planning Commission on the Committee, too. Lemon said he will contact the Planning Commission and bring another name to the Council at the next meeting.

WARRANTS: Warrants for the period 08-12-2011 to 08-18-2011, 08-19-2011 to 08-25-2011 and 08-26-2011 to 09-06-2011 were given to the Clerk for filing.

OTHER ITEMS

- **FEMA Meeting** – Executive Lemon reported that after the August meeting with FEMA, there was a September 9, 2011 application meeting. There is now funding to take care of the money the county expended during this year's flooding and there will be additional money after the budget is approved around October 1, 2011.

ITEMS OF SPECIAL INTEREST

- **Employee of the Quarter** was presented to Rick Williams, Cache County Emergency Manager by Jim Smith.

- **Proclamation – Family Day: September 26, 2011** – Chairman White asked Council member Robison to read the proclamation aloud.

(Attachment 1)

ACTION: Motion by Council member Yeates to accept the Proclamation proclaiming the fourth Monday of every September as Family Day – A Day to Eat Dinner with Your Children. Potter seconded the motion. The vote was unanimous, 7-0.

UNIT OR COMMITTEE REPORTS

- **Cache County Library – Marsha Herron** updated the Council on the operations of the Cache County Library including number of computers available, books, audio/visual collection, programs, story time attendance, space and staff wages concerns and promotion of the Library.

In response to Council member Petersen's questions Herron said about 6,000 E-books are available at the library from the state library. Problems with the programs associated with requesting E-books are being resolved.

PUBLIC HEARINGS, APPEALS AND BOARD OF EQUALIZATION MATTERS

ACTION: Motion by Council member Petersen to convene as a Board of Equalization. Yeates seconded the motion. The vote was unanimous, 7-0.

THE COUNCIL CONVENED AS A BOARD OF EQUALIZATION.

BOARD OF EQUALIZATION

- **Property Tax Hardship Applications** – The Council reviewed hardship applications and two requests were tabled awaiting further information *(Details are on file in the Office the Cache County Auditor)*

ACTION: Motion by Council member Petersen to approve the request for No. 07-017-0003. Yeates seconded the motion. The vote was unanimous, 7-0.

ACTION: Motion by Vice Chairman Buttars to table Property Tax Hardship request for No. 07-014-0030 pending additional information. Yeates seconded the motion. The vote was unanimous, 7-0.

ACTION: Motion by Council member Yeates to table Property Tax Hardship request for No. 01-045-0018 pending additional information. Potter seconded the motion. The vote was unanimous, 7-0.

ACTION: Motion by Council member Zilles to approve the remaining Property Tax Hardship requests. Yeates seconded the motion. The vote was unanimous, 7-0.

- **Set Hearing dates for September and October 2011** – Executive Lemon observed that all of the recommended dates may not be necessary, but should be set aside in the event they are needed.

ACTION: Motion by Vice Chairman to set the Board of Equalization Hearing dates for all day on September 27 and 29, 2011 and October 4 and 6, 2011. Yeates seconded the motion. The vote was unanimous, 7-0.

ACTION: Motion by Council member Yeates to adjourn from the Board of Equalization. Zilles seconded the motion. The vote was unanimous, 7-0.

THE COUNCIL ADJOURNED FROM THE BOARD OF EQUALIZATION

PUBLIC HEARING SET: SEPTEMBER 27, 2011 AT 6:00 P.M.-OPEN 2011 BUDGET

ACTION: Motion by Council member Robison to set a Public Hearing for September 27, 2011 at 6:00 p.m. to Open the 2011 Budget. Yeates seconded the motion. The vote was unanimous, 7-0.

PUBLIC HEARING: SEPTEMBER 13. 2011- 5:30 P.M. – LOGAN LITTLE MOUNTAIN COMMUNICATION TOWER REZONE-ERIC WOODY REQUESTING TO AMEND LEASED AREA OF PARCEL FROM A-10 TO INCLUDE PUBLIC INFRASTRUCTURE (PI) OVERLAY ZONE, LOCATED ON LITTLE MOUNTAIN, WEST OF TRENTON – Chris Harrild stated that this is a 50x50 foot leased area for a communications tower that was approved previously, but the conditional use permit expired awaiting construction and the Public Infrastructure Overlay Zone was instituted in the meantime which necessitated this request. Harrild recommended approval.

Chairman White opened the Public Hearing and invited public comment.

Patti Brockman spoke in favor of the rezone.

There was no other public comment.

ACTION: Motion by Council member Zilles to close the Public Hearing – Logan Little Mountain Communication Tower Rezone. Yeates seconded the motion. The vote was unanimous, 7-0.

PUBLIC HEARING: SEPTEMBER 13, 2011-5:45 P.M.-NORTH VALLEY LANDFILL REZONE-ISSA HAMUD REQUESTING REZONE OF 320.36 ACRES FROM A-10 TO PUBLIC INFRASTRUCTURE (PI) OVERLAY ZONE, LOCATED OFF STINK CREEK ROAD NORTH OF CLARKSTON – Chris Harrild explained that the rezone area is four or five miles north of Clarkston in a remote part of the county. There are no residential structures within three miles on either side of the border. The site was designated as a solid waste site. A site suitability analysis was previously submitted and approved by resolution by the Solid Waste Board of Trustees. The original 2004 resolution stated that the road to a proposed landfill would bypass Newton and Clarkston. Fire suppression is a non issue. Public concerns have been received and a site visit held. Consistent areas of concern have been contamination of ground water, traffic, access, road capacity and improvements/maintenance, winter conditions of the road, Box Elder County's willingness to accept Cache County waste, the validity of the wildlife study and site suitability analysis. Harrild noted that all these concerns will be addressed in the conditional use permitting process. Harrild said that staff recommends approval of the rezone based on findings of fact indicating that the rezone is an appropriate use in that zone.

Director Runhaar said his office had pulled maps of the area for Idaho and Utah indicating wells and source water areas. Specifics on groundwater contamination will be addressed later. Runhaar also noted that the Planning Commission vote was a 4-2 vote for approval.

Chairman White opened the Public Hearing and invited comment.

Clair Christiansen thanked the Council for the opportunity to present concerns and objections to the Council and said this is the time and place to do so, not further along in the process. Christiansen yielded to several area residents to address specific public concerns.

Heidi Hodgson, Newton resident, also thanked the Council for their willingness to listen and commented that citizens believe that their presentation may contain information that has been overlooked. Citizen concerns have been put off as being received later during the conditional use process but they still feel their concerns have not been adequately addressed. Hodgson stated

citizens believe faulty data has been used to proceed to this point and listed the following concerns that should be considered prior to any rezone: Costs, roads, water and geology, agriculture and wildlife and environment.

Hodgson said it has been an "interesting" process with small decision-making bodies being restricted to a narrow set of parameters with instructions that "you're only voting on this at this time" and more detailed information will be voted on later, much later. Each time pushing off concerns that were critical to the discussion at the time in determining the appropriateness of moving forward. For example, some of those concerns noted by Chris Harrild were the very criteria used to eliminate earlier sites in this process clear back in 2003 and 2004. When we have the same concerns that have not been adequately addressed, we are told "conditional use, conditional use." Pertinent critical concerns are whether this is a compatible use for the land, whether this is a good management for waste for the county, whether it is compatible with adjoining land uses – some of the very issues which disqualified earlier sites. Please allow us to discuss these with you. Other options for waste are available which incorporate new technology. Hodgson expressed appreciation for the Council's willingness to reopen negotiations with Box Elder County and said that the current landfill is available until 2022. There is time to make a wise decision that will be for generations to come.

Tyler Godfrey, Clarkston, also thanked the Council and reviewed revenue and operating income on the present landfill using the City of Logan Statement of Revenue, Expenses and Changes in Net Assets. Godfrey challenged Issa Hamud's statement that Logan City does not have any financial interest in the landfill operation and noted that over $4 million in the Environmental Department was transferred to the Logan General Fund during 2006-2010. Logan City makes a lot of money handling waste for the county. Godfrey further stated that the analysis study does not consider the profit to Logan City which is a cost to the consumers who pay a garbage bill. The Box Elder option would be the least expensive for citizens. The County needs to take exclusive control of landfill negotiations and choose the option that is best for the public. Godfrey asserted that Logan City is basically a third party contractor and should not be involved in negotiations with the competition. Their expertise and input should be appreciated, but they should not be at the negotiating table. Godfrey wants the best solution for the citizens.

Council member Petersen stated that if the basis for Godfrey's statement that Logan City's solid waste is a "for profit" enterprise is the transfer to the General Fund, 8% is a standard return on assets for Logan City and the percentage is not higher for solid waste than others.

Clair Christiansen said it would be nice if the county got a percentage of the profit. Christiansen's concerns are access, particularly winter access. The elevation of the Logan landfill is 4400 feet, Clarkston is 4844 feet, the landfill site is 5206 feet and the site where Logan wants to start on the site is 5486 feet – 1000 feet higher than the Logan City landfill. Higher altitude equals more severe winter weather. Three of the original eleven possible landfill sites were in the Clarkston/Newton area and when site visits were being made to those, the winter weather made the road too difficult so the site was not visited then. This is a remote part of the county and year-round accessibility is a real concern. The site suitability study lists as Number 3 – *Year-round accessibility. Areas will be excluded which are not accessible in the winter due to snowfall.* This area is not accessible for three to four months of the year. The study also indicated that traffic routes and road improvements needed to minimize conflicts with pedestrians and farm vehicles were identified as serious concerns of locals and this is not addressed in the study. Now is the time and this is the place to address them. Christiansen also said that the Citizens Advisory Committee recommended that an in-county landfill route would bypass Newton and Clarkston yet the proposed route goes by the site of the Clarkston Amphitheater. Cache County Road Department has said it has concerns about the road accessibility. These questions should have been addressed in 2004. Mitigation will be required for road improvements. The study says that parties should be working with the affected communities and it is now seven years later and no one is talking about how these things are going to be mitigated – citizens are always told to wait. The report says that traffic routes, etc. could be reported by an independent study. Christiansen

referred Council members to maps and photos of the proposed road route. The road is a narrow gravel road. The deeds of property owners don't say anything about a road right-of-way through their properties and are not inclined to give up property for a road. Attorney Swink interposed that the road is a county road and is the old road to Weston, Idaho. Christiansen reiterated that the proposed road is severely inadequate and inaccessible during the winter months.

Barry Myers, Newton, stated that the study lacks sufficient detailed surface water analysis to determine potential impacts. The landfill could affect the Newton watershed because Clarkston Creek is the main tributary to the Newton Reservoir. Myers continued that the siting study lacks enough detailed ground water analysis to ensure compliance with the Utah Department of Environmental Quality (UDEQ) and the Idaho Department of Environmental Quality (IDEQ) landfill permitting requirements. The Council is being asked to make a decision on a rezone with incomplete information. There are also concerns regarding the Weston City culinary water supply and private wells in the area. The surface water will discharge directly to the city of Weston. Myers said that according to Utah landfill permitting requirements, it needs to be shown that there is no contamination within a 250-day migration of ground water. This hasn't been accomplished, but will be accomplished later in the process, yet you, the Council, are being asked to make a decision on a rezone without that information. One of the requirements of Utah for landfills is that no "facility shall be located...below or adjacent to geologic features which could compromise the structural integrity of the facility." Myers then displayed an area where there is a landslide scarp that was mapped in 2000 by USU adjacent to the landfill site. The landfill siting study said no landslides have been mapped in the vicinity of this site. Referring to landfill requirements for the State of Utah – "exemptions from location standards with respect to airports, flood plains, wetlands, fault areas, seismic impact zones and unstable areas cannot be granted." Myers told the Council they are being asked to vote on a rezone that may be in an area that is unstable. Myers said this map was done as part of a regional study.

Lemon asked if Myers has checked with the parties who did the feasibility report? Myers said he has not.

Myers noted that there is very steep terrain in the proposed area which is in the same rock formation that has exhibited these weaknesses and landslide characteristics where the landslide exists and recommends a full geo-technical and geologic analysis be made before a rezone decision is rendered. Myers also recommended the county look into an independent contractor to do a study. The county is putting the cart before the horse and doesn't have the information necessary to make a decision on the rezone.
Myers clarified for Executive Lemon that even though the study cited a 1991 map as showing no landslide and the April 2000 map clearly showed it, the landslide did not occur that recently.

Council member Zilles said he thought water in the area always runs to Cutler Dam. Myers restated that surface water would run towards Weston City.

Kelli Myers, Newton, addressed the agricultural aspect of the discussion. Cache County is losing farm ground and according to the Envision Cache Valley document, residents support preservation of agricultural land. The LESA Handbook states that "It is widely believed that the most effective way to protect a viable agriculture landscape is to protect large blocks of contiguous land (rather than to produce a checkerboard of scattered parcels)." Myers says that the proposed landfill area is part of the largest contiguous farm land in the county. If the roads are improved, agricultural land will be threatened by residential housing that will be constructed. A landfill will require costly and difficult road development and maintenance and is incompatible with the use of the adjoining agricultural lands. The rezone makes it more difficult for agriculture to flourish in the area. It is not just 300 acres the Council will be rezoning; it changes the very nature of the land. The Council recognizes the wishes of the public to protect and preserve farm land. The rezone goes against all of the criteria needed to preserve agriculture and Myers said she doesn't believe that is the intent of the Council based on their past record.

Kendon Godfrey, Clarkston, addressed wildlife and environment issues stating that the biggest concern of people surveyed in the site analysis was the loss of wildlife habitat. Godfrey cited US Department of Interior letters which note that in the site survey analysis the Clarkston Site C has two sensitive species and one threatened species. Breeding and nesting areas are also listed as concerns as well as the impact on predators. It is not just the site that will affect wildlife, there are five miles of road proposed and the increased traffic will have an effect on wildlife. The Department of Natural Resources letter states that "From our initial assessment, this site seems to have great potential for environmental impact." It further states that Sites G & I impacts may be less than those associated with Site C. The Utah State Department of Natural Resources has stated that this area is important deer and elk habitat that would be severely impacted if Site C is used. A landfill will attract predators that will affect all ground nesting birds. If this site is chosen for a landfill, the Department of Natural Resources has indicated they will request a multi-year study for impact on sharp-tailed grouse and litigation to replace acreage equal to or greater than the acreage that is taken from sharp-tailed grouse. Recently, a population of pygmy rabbits has been found in the area and Idaho State University is doing studies on the rabbits. Pygmy rabbits are on the threatened or endangered list in most of the western United States. Also of concern is a large population of ring-necked pheasants that will be adversely affected. Drainages in the area were also of concern to the Department of Natural Resources. Godfrey urged the Council to consider new technology versus old technology and referred the Council to a letter they were given from John Rosenthal with information on new technologies available. Landfills all across the United States are using waste to produce energy. The Standard Examiner, August 8, 2011, referring to the Davis County landfill, stated that half the trash delivered to that site is used to produce steam which is used to power the facility and parts of Hill Air Force Base. The garbage that is not burned is buried and as it decomposes, it generates methane gas which is captured and sold to Hill Air Force Base who uses it to produce electricity for Rocky Mountain Power. EPA statistics indicated that there is a decline in the number of landfills across the nation. There are states that do not allow any landfills at all. Why should we spend billions of dollars on an outdated remote landfill that cannot capitalize on the revenues that should be generated by the use of new technologies? There are so many environmental concerns that have not been addressed; we should not be in a hurry to do something that later on we will wish we had thought through better. Do we really want to spend billions of dollars on a project that may have a projected 80 to 100 year life but in reality may be out of business in twenty or less years because of governmental regulations or new technology? Godfrey says he does not believe the rezone should be granted because it is not compatible with the site or the vision for Cache Valley.

Bruce Olenick, IDEQ, observed that we all want clean air and clean water but we also all need places to dispose of solid waste, etc. and environmental effects don't follow state boundaries. The landfill is in an Idaho watershed so it is a concern to Idaho. IDEQ has the following concerns: No. 1 – The planning process must go out for ample ground water and surface water concerns to be heard. No. 2 - The design standards are protective of Idaho water standards. No. 3 – The modeling framework that will be employed is robust enough to detect any type of failures in design. It is not an issue of if the landfill will fail eventually, it is a matter of when. All landfills leak eventually whether it's a hundred years from now or ten years from now. It is our job as citizens is to build the most cost effective as well as environmentally effective landfill design we possibly can to protect our resources. Olenick will take these concerns to meetings with the UDEQ. It is far easier to deal with concerns now than try to clean up ground water afterwards.

Jaydene Godfrey, Clarkston, referenced the overlay zone noting that these standards are provided to ensure that any public development recognizes the physical and environmental constraints of the development site. A closure and post-closure plan prepared by appropriate licensed professionals shall be provided by the solid waste facility. Godfrey said that, to her knowledge, a closure and post-closure plan has not been prepared and the word appropriate needs to be acutely looked at as appropriate would not include any employee of any entity that stands to gain economically from the results The planning commission based their decision on two standards, omitting the third and totally disregarded the opening statement about sections in

the ordinance. Godfrey asked the Council to consider the physical and environmental constraints of the development site. This rezone request does not meet the requirements.

Mayor Camille Larsen, Weston, observed that the study the Council is basing its decision on is almost ten years old and sub-studies need to be done to find out for certain where the water is. At the end of Stink Creek Road about 1 ½ miles in, a resident just drilled a well and is getting 200 gallons per minute. Less than 100 yards north, that same well driller drilled a well about six or seven years ago and only got 50 gallons per minute. Same well driller drilled right across the street in between those two wells and found nothing. Nobody really knows what is going on underneath the ground in relation to water. There needs to be caution and consideration and more research.

Clinton Aston, Weston, Idaho, teaches science and agriculture and believes the suitability statement has biases as it didn't deal with anything north of the border. Aston encouraged the Council to drive up to the site. Accurate information is needed to base a rezone decision on.

There was no other public comment.

ACTION: Motion by Vice Chairman Buttars to close the Public Hearing- North Valley Landfill Rezone-Issa Hamud requesting rezone of 320.36 acres from A-10 to Public Infrastructure (PI) Overlay Zone, located off Stink Creek Road north of Clarkston. Potter seconded the motion. The vote was unanimous, 7-0.

Chairman White thanked the citizens for an orderly and informative presentation

Vice Chairman Buttars said that access to the site has been discussed and some of the statements made indicate that the Citizens Advisory Committee and the Solid Waste Committee need to be more involved. The point was brought up that the initial resolution stated that access to the site would not go through Clarkston and that matter needs to be addressed. If the Council is to make a decision on the site, more input from citizens is needed on the access issue.

ACTION: Motion by Vice Chairman Buttars that the Citizens Advisory Committee and the Solid Waste Advisory Board be given the task of determining access for the landfill site and the access will be recommended to the Planning Commission at the time the conditional use permit is applied for. Potter seconded the motion. The motion passed, 6 aye – Buttars, Petersen, Potter, White, Yeates & Zilles and 1 nay – Robison.

Discussion on motion:
Council member Zilles said he was not aware that this landfill site would drain into Idaho and if that is the case, Idaho does need to be involved.

Weston Mayor Larsen said Idaho has not been involved and that July was the first they had heard of anything relative to the landfill site. They were not involved in the feasibility study.

Chairman White reassured the citizens that nothing more is being considered for approval than the rezone and everything presented will be taken into consideration.

Council member Potter stated he has concerns over the statement that Box Elder would be cheaper than Clarkson and clarified that no agreement has been reached with Box Elder County. The costs of such an agreement are not known and Cache County doesn't even know if Box Elder is an option at this point.

INITIAL PROPOSAL FOR CONSIDERATION

- **Ordinance No. 2011-12 – Amendments to Title 12.04, 12.08, 16, 17.02.070 regarding roadway standards** – Director Runhaar reminded the Council they have reviewed the amendments at previous meetings and this presents those amendments in ordinance language form.

(Attachment 2)

ACTION: Motion by Council member Robison to waive the rules and approve Ordinance No. 2011-12-Amendments to Title 12.04, 12.08, 16, 17.02.070 regarding roadway standards. Potter seconded the motion. The vote was unanimous, 7-0.

Ordinance No. 2011-12: The vote was 7-0.

	BUTTARS	POTTER	PETERSEN	ROBISON	WHITE	YEATES	ZILLES	VOTES CAST
AYE	X	X	X	X	X	X	X	7
NAY								0
ABSTAINED								0
ABSENT								0

- **Resolution No. 2011-20 – To adopt the Cache County Manual of Roadway Design and Construction Standards**

(Attachment 3)

ACTION: Motion by Council member Robison to waive the rules and approve Resolution No. 2011-20 – To adopt the Cache County Manual of Roadway Design and Construction Standards. Petersen seconded the motion. The vote was unanimous, 7-0.

- **Ordinance No. 2011-13 – Creating a Community Development and Renewal Agency** – Executive Lemon explained that full details will be given at a later date. There is an entity in the unincorporated part of the county who wants to expand their facility. Most of the expansion will be in personal property. They are competing with three other states to increase production at this facility. The state wants something done on the local level before providing any economic incentive. The first thing to be done is for the county to create a community development district encompassing the entire unincorporated portion of Cache County. The next step is to propose the creation of an economic development area where the county can propose a portion of the incremental tax increase to go back to this entity for a time so the state will provide a match. The county is working with the Chamber of Commerce and the state of Utah. It is believed this will create fifty-four new jobs that will be 125% above the average Cache County wage. This just starts the process and doesn't approve anything yet. Lemon said the county has not provided many incentives, but for this particular expansion, the county will not receive any of the benefit if no incentive is

provided. This ordinance creates the agency and makes the County Council the Board of the agency.

(Attachment 4)

ACTION: Motion by Council member Petersen to waive the rules and approve Ordinance No. 2011-13 – Creating a Community Development and Renewal Agency. Yeates seconded the motion. The vote was unanimous, 7-0.

Ordinance No. 2011-13: The vote was 7-0.

	BUTTARS	POTTER	PETERSEN	ROBISON	WHITE	YEATES	ZILLES	VOTES CAST
AYE	X	X	X	X	X	X	X	7
NAY								0
ABSTAINED								0
ABSENT								0

- **2012 Budget Preparation Schedule** – Executive Lemon explained this is for review by the Council to see if there are any concerns. The next agenda will have an item for discussion about Council priorities for the budget. Petersen asked Lemon to email him an expenditure request form to look over.

(Attachment 5)

COUNCIL MEMBER REPORTS

Kathy Robison verified that the appointments to the Road Capital Improvement Advisory Board are actually the road committee discussed at the last Council meeting.

ADJOURNMENT

The Council meeting adjourned at 7:25 p.m.

ATTEST: Jill N. Zollinger
County Clerk

APPROVAL: Jon White
Chairman

CACHE COUNTY
CORPORATION

M. LYNN LEMON
COUNTY EXECUTIVE/SURVEYOR

199 N. MAIN
LOGAN, UTAH 84321
TEL 435-755-1850
FAX 435-755-1981

PROCLAMATION

WHEREAS the use of illegal and prescription drugs and the abuse of alcohol and nicotine constitute the greatest threats to the well-being of America's children;

WHEREAS 16 years of surveys conducted by the National Center on Addiction and Substance Abuse (CASA) at Columbia University have consistently found that the more often children and teenagers eat dinner with their families the less likely they are to smoke, drink and use illegal drugs;

WHEREAS frequent family dining is associated with lower rates of teen smoking, drinking, illegal drug use and prescription drug abuse;

WHEREAS the correlation between frequent family dinners and reduced risk for teen substance abuse is well documented;

WHEREAS parents who are engaged in their children's lives – through such activities as frequent family dinners – are less likely to have children who abuse substances;

WHEREAS family dinners have long constituted a substantial pillar of family life in America;

NOW THEREFORE, be it resolved, that the Cache County Council and Cache County Executive, State of Utah, do hereby proclaim the fourth Monday of every September as

Family Day – A Day to Eat Dinner with Your Children™

and urge all citizens of Cache County to recognize and participate in its observance.

In witness thereof, as Chairman of the Cache County Council and Cache County Executive, we have hereunto set our hand this 13th day of September, 2011.

ATTEST:

STATE OF UTAH COUNTY CLERK SEAL OF CACHE COUNTY

Jon White

Jon White, Council Chairman

Jill N. Zollinger

Jill N. Zollinger, County Clerk

M. Lynn Lemon

M. Lynn Lemon, Cache County Executive

CACHE COUNTY, UTAH
ZONING ORDINANCE AMENDMENTS

ORDINANCE NO. 2011-12

Disclaimer: This is provided for informational purposes only. The formatting of this ordinance may vary from the official hard copy. In the case of any discrepancy between this ordinance and the official hard copy, the official hard copy will prevail.

AN ORDINANCE AMENDING AND SUPERSEDING CHAPTERS 4, AND 8 OF TITLE 12, CHAPTERS 2, 3, AND 4 OF TITLE 16, AND CHAPTER 2 OF TITLE 17 OF THE CACHE COUNTY ORDINANCE REGARDING CACHE COUNTY'S ROADWAY STANDARDS

WHEREAS, the State of Utah has authorized Cache County to adopt Land Use Ordinances and Maps; and

WHEREAS, the purpose of this ordinance is to provide fair, consistent, and equitable land use regulations for all land owners; and

WHEREAS, the purpose of this ordinance is to provide clarity and ease of use of the County's Zoning Ordinance for all citizens; and

WHEREAS, the Cache County Council caused notice of the hearing and the amendments to Title 12, 16, and 17 of the Cache County Ordinance to be advertised at least ten (10) days before the date of the public hearing in *The Herald Journal*, a newspaper of general circulation in Cache County; and

WHEREAS, the amendments to Title 12, 16, and 17 of the Cache County Ordinance were submitted to the Cache County Planning Commission ("Planning Commission") and on April 19th, 2011, the Planning Commission recommended approval of the proposed changes to the County Council; and

WHEREAS, on June 14th, 2011, at 6:00 P.M., the Cache County Council held a public hearing to consider any comments regarding the proposed amendments to Title 12, 16, and 17 of the Cache County Ordinance. The Cache County Council accepted all comments; and

WHEREAS, the Cache County Council has determined that it is both necessary and appropriate for the County to amend and implement these ordinances.

NOW, THEREFORE, the County Legislative Body of Cache County ordains as follows:

1. Statutory Authority.

   The statutory authority for enacting this ordinance is Utah Code Annotated Sections 17-27a Part 1 and Part 3, and 17-53 Part 2 (1953, as amended to date).

2. Purpose of Provisions.

The purpose of this ordinance is to amend and supersede Chapters 4, and 8 of Title 12, Chapters 2, 3, and 4 of Title 16, and Chapter 2 of Title 17 of the Cache County Ordinance regarding Cache County's roadway standards, to insure compatibility with surrounding land uses, conformity with the Cache County General Plan, consistency with the characteristics and purposes stated for the zones, and protection, preservation and promotion of the public interest, health, safety, convenience, comfort, prosperity and general welfare.

3. Findings

A. The amendments to Title 12, 16, and 17 of the Cache County Ordinance are in conformity with Utah Code Annotated, §17-27a Part 5 (1953, as amended), which requires compliance with standards set forth in an applicable ordinance.
B. The amendments to Title 12, 16, and 17 of the Cache County Ordinance are necessary to establish roadway design and construction standards throughout Cache County.
C. The amendments to Title 12, 16, and 17 of the Cache County Ordinance will insure compatibility with surrounding land uses, conformity with the Cache County General Plan, consistency with the characteristics and purposes stated for Zoning Districts, and protection, preservation and promotion of the public interest, health, safety, convenience, comfort, prosperity and general welfare.
D. It is in the interest of the public and the citizens of Cache County that the proposed amendments to Title 12, 16, and 17 of the Cache County Ordinance be approved.

4. Title 12, Chapters 4 and 8 of the Cache County Ordinance is amended to read as follows:

SEE EXHIBIT A

Title 16, Chapters 2, 3, and 4 of the Cache County Ordinance is amended as follows:

SEE EXHIBIT B

Title 17, Chapter 2 of the Cache County Ordinance is amended as follows:

SEE EXHIBIT C

5. Prior Ordinances, Resolutions, Policies And Actions Superseded.

This ordinance amends and supersedes Chapters 4 and 8 of Title 12, Chapters 2, 3, and 4 of Title 16, and Chapter 2 of Title 17 of the Cache County Ordinance, and all prior ordinances, resolutions, policies, and actions of the Cache County Council to the extent that the provisions of such prior ordinances, resolutions, policies, or actions are in conflict with this ordinance. In all other respects, such prior ordinances, resolutions, policies, and actions shall remain in full force and effect.

6. Effective Date.

This ordinance takes effect on September 27th, 2011. Following its passage but prior to the effective date, a copy of the Ordinance shall be deposited with the County Clerk and a short summary of the ordinance shall be published in a newspaper of general circulation within the County as required by law.

APPROVED AND ADOPTED this 13th day of September, 2011.

	In Favor	Against	Abstained	Absent
Potter	X			
Buttars	X			
White	X			
Petersen	X			
Robison	X			
Yeates	X			
Zilles	X			
Total	7	0	0	0

CACHE COUNTY COUNCIL

Jon White

Jon White, Chair
Cache County Council

ATTEST:

Jill Zollinger

Jill Zollinger
Cache County Clerk

Publication Date: September 27, 2011

Exhibit A: Title 12 Roadways and Public Places

Chapter 12.04 is amended to read as follows:

Chapter 12.04 Roadway Standards
12.04.010: Standards

A. The Cache County Council shall adopt a Manual of Roadway Design and Construction Standards (herein after "Standard") relating to the standards and requirements for the construction of roadways, accesses, and any and all development within County right-of-ways. The Standard shall provide the requirements for the development of all roadways for development, County improvements, or for modification made to roadways by other entities. The Standard shall be on file with the County Clerk and available for reference in the Development Services Office.

B. Intent: The intent of this ordinance is to provide for the equitable development of roadways utilizing standard engineering and construction practices and to provide for safe and efficient access to homes, businesses, and for through travelers.

C. Roadway Construction and Design Standards: The County shall maintain within the Standard a roadway classification system with requirements for the construction of each road by type.

Table 12.04.010 Typical Roadway Sections
(See Manual of Roadway Design and Construction Standards for further details)

Table 2.2
Roadway Typical Sections

		Private[6]	Mountain Road [1,2,6]	Rural[6]	Local	Collector	Arterial
Planned	Planned Design Limits - Approximate ADT	Under 30	Under 30	Under 30	30-1500	1500-5000	Over 5000
Minimum Width (feet)	Lane Width[3]	10	12	10	10	11	12
	Right-of-Way	33	66	66	66	80	100
	Median/Turn Lane [4]	-	-	-	12	12	14
	Shoulder (each side)	0	0	2	5	6	8
	Paved Width of Shoulder	0	0	0	1	3	3
	Road Surface Material[5]	Gravel (A)	Gravel (A)	Gravel (A)	Paved (B)	Paved (B)	Paved (C)

[1] Single lane roads may be permitted for Mountain roadways.
[2] Single lane roads do not provide adequate levels of service to development and may be required to meet the Rural road standard, provide pullouts, or other improvements as deemed necessary to provide adequate service provision in compliance with this standard, the County Code, and the latest edition of the International Fire Code.
[3] Minimum roadway is 2 lanes of traffic unless otherwise specified.
[4] Provided only where needed as determined by the County Engineer or a Traffic Impact Study

[5] Refer to Appendix Table A-8 Typical Cross Section Structural Values
[6] No commercial or industrial development shall be permitted.

12.04.020: Development of Roadways

A. The streets or roads in a new subdivision or development shall connect to a county road, a maintained road system or an improved state highway, or an improved city street. Where an off site connection is necessary to provide access to such a road or highway, the developer shall acquire the rights-of-way and construct the improvements required at their expense.
B. Where land abutting an existing substandard street or road is subdivided or developed, the developer shall dedicate any necessary additional rights-of-way and improve the adjacent roadway to conform to the County's Standard.
C. It is unlawful for any person to commence work upon or within any County right-of-way until a permit has been granted in conformance with the Standard.
D. The County shall cause any entity working within the County right-of-way or on County facilities to pay any and all associated cost for review of design/construction documents, traffic impact studies, inspections of improvements, or any other costs associated with the improvement of County facilities. All fees shall be adopted by the Council within a fee schedule.

12.04.030: Damage by Water and Farm Implements

It is unlawful for any person to damage or cause to be damaged any county road or road rights-of-way by permitting irrigation waters or other drainage waters to enter upon or damage such road or to permit or cause damage to such roads by use of any farm tractors, implements or otherwise. (Ord. 81-02)

Chapter 12.08 is repealed and the section is Reserved.

Exhibit B: Title 16 Subdivision Ordinance

16.02.060 Cluster Subdivision Option

- The following section amended to read as follows:

F. All roads developed within the Cluster Subdivision shall be designed and constructed in accordance with Title 12 and the Cache County Manual of Roadway Design and Construction Standards, and shall also be designed in a manner as to limit the amount of impact on the open space areas of subdivisions.

16.03.30 Preliminary Subdivision Plat Requirements

- The following section amended to read as follows:

Subsection C, Number 17.

All existing and proposed roadway locations and dimensions, including the width of the driving surface and the rights-of-way, with cross sections of all proposed roads. All proposed roads shall be designed to comply with Title 12 and the Cache County Manual of Roadway Design and Construction Standards.

16.04.040 Streets

- Sections D, E, F, and G deleted.
- Minimum Street/Road Requirements Table deleted.
- The following sections amended to read as follows:

Introductory Paragraph:

All streets shall be designed and constructed in accordance with the specifications found within Title 12 of the Cache County Ordinance.

Subsection A: For subdivisions, boundary line adjustments, or permits for conditionally or permitted uses located adjacent to a substandard County road(s), the owner of the site proposed for a subdivision shall provide, as part of the subdivision application, dedication documents for the additional road right-of-way, as required by the County and shall, as a condition of subdivision approval, make improvements to the adjacent County road determined necessary, and reasonably related, to the needs of the proposed subdivision, to the road standards of the County, the Logan Urbanized Area, the Utah Department of Transportation, or the Cache Metropolitan Planning Organization Area, as applicable.

Subsection C: For roads and streets that are interior to the proposed subdivision and which are not dedicated or accepted by the County for dedication, such road(s) or street(s) shall be identified on the subdivision plat or survey as a private road with the appropriate subdivision notes and shall cause appropriate road signage to be installed indicating: Private Road – No County Road Services Provided.

16.04.110 Completion of Subdivision Improvements

- Sections E, F, G, H, and I deleted.
- The following section amended to read as follows:

Subsection B: Infrastructure construction drawings and construction within the subdivision shall conform to the requirements found within Title 12 and the Cache County Manual of Roadway Design and Construction Standards.

Exhibit C: Title 17 Zoning Ordinance

17.02.070 Establishment of Land Use Authority

- The following section amended to read as follows:

Subsection B, Number 2.

c. The Planning Commission shall be a recommending body to the Cache County Council for the Cache County Manual of Roadway Design and Construction Standards adopted within Title 12.

d. The Planning Commission shall have the powers and duties as assigned by this Chapter and Utah Code Annotated, section 17-27a-302 (1953, as amended).

CACHE COUNTY, UTAH
RESOLUTION

RESOLUTION NO. 2011-20

Disclaimer: This is provided for informational purposes only. The formatting of this resolution may vary from the official hard copy. In the case of any discrepancy between this resolution and the official hard copy, the official hard copy will prevail.

A RESOLUTION OF CACHE COUNTY APPROVING THE CACHE COUNTY MANUAL OF ROADWAY DESIGN AND CONSTRUCTION STANDARDS

WHEREAS, the Cache County Council has adopted Title 12: Roadways and Public Places; and

WHEREAS, the Manual of Roadway Design and Construction Standards has been reviewed by members of the Cache County Council; and

WHEREAS, Cache County has developed consistent standards for the development of roads in the interest of the health, safety, and welfare of persons travelling County roadways; and

WHEREAS, the Manual of Roadway Design and Construction Standards was submitted to the Cache County Planning Commission ("Planning Commission") and on April 19th, 2011, the Planning Commission recommended approval of the proposed Manual of Roadway Design and Construction Standards to the Cache County Council; and

WHEREAS, the Cache County Council has determined that it is both necessary and appropriate for the County to implement the Manual of Roadway Design and Construction Standards.

NOW, THEREFORE, the County Legislative Body of Cache County resolves as follows:

1. Purpose of Provisions.

   The purpose of this resolution is to implement the Manual of Roadway Design and Construction Standards regarding Cache County's roadway standards, to insure compatibility with surrounding land uses, conformity with the Cache County General Plan, consistency with the characteristics and purposes stated for the zones, and protection, preservation and promotion of the public interest, health, safety, convenience, comfort, prosperity and general welfare.

2. ,Findings

   A. This resolution is necessary to establish roadway design and construction standards throughout the County in compliance with §12.04.010 [A].
   B. This resolution will insure the protection, preservation and promotion of the public interest, health, safety, convenience, comfort, prosperity and general welfare.
   C. It is in the interest of the public and the citizens of Cache County that the proposed resolution to adopt the Manual of Roadway Design and Construction Standards be approved.

3. Manual of Roadway Design and Construction Standards as follows:

SEE EXHIBIT A

4. Effective Date. Effective upon passage.

APPROVED AND ADOPTED this 13th day of September, 2011.

	In Favor	Against	Abstained	Absent
Potter	X			
Buttars	X			
White	X			
Petersen	X			
Robison	X			
Yeates	X			
Zilles	X			
Total	7	0	0	0

CACHE COUNTY COUNCIL

Jon White

Jon White, Chair
Cache County Council

ATTEST:

Jill Zollinger

Jill Zollinger
Cache County Clerk

CACHE COUNTY, UTAH

MANUAL OF ROADWAY DESIGN & CONSTRUCTION STANDARDS

September 13th, 2011

TABLE OF CONTENTS

1.0 GENERAL IMPROVEMENT REQUIREMENTS

1.1 Scope of Work.

This section defines the general requirements for roadway related improvements designed and constructed as public infrastructure. The improvements shall include all public utilities (i.e. sanitary sewer and culinary water as pertains to roadway crossings, storm sewer and drainage facilities), grading, surfacing, erosion control, traffic signing, traffic control, and road improvements. Roadway improvements must provide for future extension beyond the proposed development and must be compatible with the contour of the ground for proper drainage and for servicing future development.

Developers shall be required to make improvements to roadways in accordance with the County adopted design standards. The developer is encouraged to work with adjacent property owners that will benefit from said roadway improvements for the purpose of mutual participation. The developer is responsible for all up-front costs associated with the design, acquisition of rights-of-way, and construction of the proposed improvements.

1.2 Definitions

Any terms or words not specifically defined herein shall be terms as defined in the common English language.

A. Developing Parcel – a parcel or lot being developed through the process of a subdivision, conditional use permit, building permit for a single family home, or commercial business.
B. Substandard Roadway – Any roadway that does not meet the standards as established within this document based on the classification of the roadway and the existing conditions of the roadway.
C. Private Road – A road constructed and maintained by private individual(s) or private entity(s).
D. Average Daily Traffic – A measure of the amount of annual average traffic on a roadway per day. A single family home is designated as impacting a roadway with ten (10) average trips per day. Business uses will vary in their impact. Abbreviated as ADT.

1.3 Electronic Deliverable Requirements

Prior to final acceptance of improvements, surveys in electronic format shall be submitted and accepted by Cache County.

The electronic drawings shall be in either Computer Aided Drafting (CAD) or Geographic Information Systems (GIS) file format. File formats shall be approved by the director.

All CAD and GIS files shall be registered to the North American Datum 83 (NAD 83) Utah State Plane North Zone coordinate system (grid) with ties to two public monuments. Information on monuments is available through the Cache County Surveyor.

1.4 Licensed Professional Seal Requirements

Complete and detailed construction plans and drawings of all improvements shall be submitted to Cache County Development Services for review and approval prior to issuance of a permit(s). The plans containing the appropriate approval signatures and the current adopted specifications shall be the only valid documents from which the contractor shall construct the permitted improvements. The contractor shall have a copy of the approved plans and permit available at the construction site and shall make them available to the County's representative upon request.

Any final infrastructure improvement plan or report shall bear the seal of a professional licensed to

prepare such plans in Utah. Additionally the signature of the individual named on the seal and the date shall appear across the face of each original seal.

1.5 Inspection

All construction work involving the installation or repair of public improvements shall be subject to inspection by the County. It shall be the responsibility of the person responsible for construction to ensure that inspections take place where and when required as indicated in the specifications, on the permit, and as determined by the County Engineer. Certain types of construction will require continuous inspection while others will only require periodic inspections. The type and amount of inspection performed by Cache County shall be determined by the County Engineer.

Continuous inspection may be required on the following types of work:

A. Placement of road surfacing
B. Placing of concrete
C. Laying of drainage pipe
D. Testing and backfilling as per approved specifications
E. Roadway grading and gravel base placement and compaction

For construction requiring continuous or periodic inspection, no work shall start until an inspection request has been made to the County by the person responsible for the construction and the required submittals received and approved by the County. Notice of the initiation of work and requests for inspection shall be made at least two (2) working days prior to the commencing of the work. Construction completed without a required inspection will be required to be removed and reinstalled at the Contractor's expense.

Work performed by the Contractor which requires periodic or continuous inspection beyond the normal working hours of Cache County, on weekends, or on County holidays shall require payment of current County overtime rates by the contractor.

1.6 Guarantee of Work

For all private and public roadway improvements required as part of a project approval, the contractor shall provide a performance bond or other approved financial surety in the amount of 110% of the value of the proposed work naming Cache County as owner for a term covering the project construction up to final acceptance by the County. If out of specification work is not corrected by the contractor then the value of the work necessary to correct it will be applied against the performance bond. Following final project acceptance by the County, the performance bond shall continue to extend for a one (1) year period of time or as otherwise allowed by Utah Code §17-27a-604.5 (1953 as amended). Roadway improvement financial sureties may be incorporated into development agreements that also cover additional development needs (utilities, etc.).

The contractor will be required to correct any work of the initial construction that fails as determined by the County Engineer, within the time frame of the bond. If the contractor does not respond in a timely manner County forces (or a designated contractor) will complete the work with costs being applied against the performance bond.

The developer/contractor will be responsible to see that the excavation, backfilling, and compaction are properly and adequately completed and that all necessary permitting is obtained. Settlement of trenches within a period of one (1) year after final acceptance of the project shall be considered incontrovertible evidence of inadequate compaction, and the developer/contractor shall

be responsible for correcting the condition in accordance with the provisions of these standards and specifications.

1.7 Other Standards Adopted

In addition to the adopted Cache County standards, the County adopts the following as standards for all issues related to the design, construction, maintenance, and other related road, utility, and infrastructure improvements not specifically covered within this document:

A. American Public Works Association Manual of Standard Specifications (current edition)
B. American Public Works Association Manual of Standard Plans (current edition)
C. AASHTO (American Association of State Highway and Transportation Officials): A Policy on Geometric Design of Streets and Highways (current edition)
D. AASHTO: Standard Specifications for Transportation Materials and Methods of Sampling and Testing (current edition)
E. UDOT Roadway Drainage Manual of Instruction (current edition)
F. AASHTO: Roadway Design Guide (current edition)
G. Manual of Uniform Traffic Control Devices (MUTCD) (current edition)

1.8 Design Exceptions

Design exceptions to the Cache County Manual of Roadway Design and Construction Standards will be considered and evaluated on an individual basis by the Director of Development Services (herein referred to as the "Director"), or the Director's designee. Full justification and documentation must be provided explaining the reasoning as to why the roadway standards cannot be met, why an alternative design or construction method can meet the intent of the roadway standards, and including any other relevant information.

A. In considering any design exception, the Director may consult with the following individuals based on the needs of the project or infrastructure in question:
    1. Cache County Executive
    2. Cache County Road Superintendent
    3. Cache County Engineer
    4. Cache County Fire Chief
B. The Director shall evaluate exceptions to the standards as set forth in this policy and approve, deny, or modify the requested exception. For design exceptions on land use issues heard by the County Planning Commission, a further review and recommendation on the infrastructure improvements may be forwarded from the Commission to the County Council. The County Council shall have the final authority to provide an exception to this standard.

1.9 Traffic Impact Studies

The Director may require that a Traffic Impact Study (TIS) be completed for any project where it is deemed necessary.

A. The purposes of the TIS are as follows:
    1. Document whether or not the access request or roadway can meet the standards and requirements of this Standard and other applicable County ordinances and policies.
    2. Analyze appropriate location, spacing, and design of access connection(s) necessary to mitigate traffic impacts.
    3. Analyze operational impacts on the roadway in accordance with this Standard and any other applicable County ordinances and policies.
    4. Recommend the need for any improvements to the adjacent and nearby roadway system to maintain a satisfactory level of service and safety and to protect the function of the road system while providing appropriate and necessary access to the proposed development.

5. Assure that the internal traffic circulation of the proposed development is designed to provide safe and efficient access to and from the adjacent and nearby roadway system consistent with this standard.

B. Traffic Impact Study Requirements

The traffic study shall, at a minimum, incorporate traffic engineering principles and standards as presented in national practices. Additional requirements and investigation may be imposed upon the applicant as necessary.

The County Engineer shall determine the need and requirements for a traffic impact study. The requirements of the TIS may be expanded, reduced, or altered by the County Engineer based on the proposed project being analyzed.

1. Study Area - Defined by County Engineer.
   The study area, depending on the size and intensity of the development and surrounding development, may be identified by parcel boundary, area of immediate influence, or reasonable travel time boundary.
2. Design Year - Opening day of project.
3. Analysis Period - Identify site and adjacent road traffic for weekday A.M. and P.M. peak hours.
4. Data Collection
   Identify site and adjacent road roadway and intersection geometries.
   Identify adjacent road(s) traffic volume and characteristics.
5. Conflict / Capacity Analysis
   Diagram flow of traffic at access point(s) for site and adjacent development.
   Perform capacity analysis as determined by County Engineer.
6. Right-of-Way Access
   Identify right-of-way, geometric boundaries, and physical conflicts. Investigate existence of private, city, federal, state, or no access/limited access control lines.
7. Design and Mitigation
   Determine and document safe and efficient operational design needs based on site and study area data. Identify operational concerns and mitigation measures to ensure safe and efficient operation pursuant to appropriate County Roadway Functional Classifications (See Section 2.1).

C. Study Report and Format

Traffic impact studies shall be prepared by a firm or individual approved by the County as capable of performing a traffic analysis and when necessary, include engineered drawings based on County standards drawings and specifications. The traffic impact study should follow the recommended format below.

1. Introduction and Summary
2. Proposed Project
3. Study Area Conditions
4. Analysis of Existing Conditions
5. Projected Traffic
6. Traffic Analysis
7. Conclusions
8. Recommendations
9. Appendices
   - Traffic Counts
   - Traffic Capacity Analysis
   - Accident Summary
   - Request for change of access (if applicable)

10. Figures and tables
    a. Site location – showing area roadways
    b. Site Plan
        i. Identify geometric / physical concerns relating to area, site, and specific access points. Include adjacent road and access points.
    c. Existing roadway and traffic control features (number of lanes, lane widths, alignment, location of traffic signals, signs). Include off-system features as related to site plan and access point(s).
    d. Existing daily volumes (directional if possible) and peak hour turning volumes. Discuss traffic characteristics (vehicle mix, % make-up, and any special vehicle requirements).
    e. Collision diagram summary.
    f. Site generated trip summary. Discuss trip/vehicle make-up and any special vehicle requirements. Discuss trip reduction strategies, if applicable.
    g. Directional distribution of site generated traffic.
    h. Assignment of non-site related traffic (existing, background, and future). Document both existing and committed development, and when appropriate other background planned development traffic. Assignment of total future non-site traffic for design year.
    i. Assignment of Site Traffic
    j. Traffic Capacity Analysis
        i. Projected levels of service without the project – coincide with development phase years.
        ii. Projected levels of service with the project (by development phase years)
        iii. Recommended mitigation / improvement

Scaled schematic drawings illustrating alignment, number of lanes, lane widths, signing, and pavement markings. If traffic signal modifications are proposed, signal phasing, signal head locations, and lane marking shall be shown.

2.0 ROADWAY DESIGN

The whole of Cache County, including its cities and unincorporated communities, was developed with the road grid as the basic building block of settlement. The grid provides multiple options for travel direction which reduces traffic congestion; provides for a clear, consistent, and understandable method for the arrangement of housing and business; and provides for interconnectivity within the transportation network.

Continued emphasis should be placed on maintaining the gridded network of public roads. New development shall be required to follow the grid pattern in all new roads being constructed wherever practical. Connections to existing and future planned roads shall also be required as development progresses. New roads proposed by county, city, state, and federal governments shall closely follow the established road grid where possible.

All roads shall be located on the grid and rights-of-way should vary based on roadway functional classification.

2.1 Roadway Functional Classification

A. Current Roadway Classification

Cache County has a tiered classification system for all roadways that are under the jurisdiction and maintenance of the County (See Table 2.1). *Appendix 5.0 - Current Road Conditions Classification* provides for a graphical reference to the County's roadways and their classification.

1. Arterial (A)– This category is appropriate for use on roadways that have the capacity for moderate speed (generally 45 mph or higher) and moderate to high traffic volumes. There is a reasonable ability for direct access, but the priority is for safety, through transit, and mobility needs within this category. These facilities move traffic across multiple communities or jurisdictions, typically connecting facilities of system importance and through urban areas that have significant potential for development or redevelopment of adjacent land to the highest and best use.

Table 2.1
Roadway Functional Classifications

	County Designation
Category Assignment	Level-of-importance
A	Arterial
C	Collector
L	Local
R	Rural
P	Private
M	Mountain
U	Unimproved

2. Collector (C) – This category is appropriate for use on roadways that have the capacity for moderate to low speeds (generally to a speed range of 40 mph or less) and moderate to high traffic volumes. While this category provides service to through traffic movements, it allows more direct access to occur. These facilities move traffic across multiple communities or jurisdictions, typically connecting facilities of system importance, but through urban areas that are significantly developed to the point where function (travel speed and capacity) has eroded.
3. Local (L) – This category is appropriate for use on roadways that have the capacity for moderate to low speeds and moderate volumes. This category provides a balance between through traffic movements and direct access. These facilities move both regional and local rural traffic with emphasis on local movements.
4. Rural (R) – This category is appropriate for use on roadways that have the capacity for

moderate to low speeds and low volumes. This category provides access to farms, other agricultural uses, and dispersed rural residences. Gravel or chip & seal road surfacing is typically acceptable.

5. Private – This category is appropriate for use on roadways that have the capacity for moderate to low speeds and low volumes. This category provides access to farms, other agricultural uses, and dispersed rural residences. These roads are not typically through roads providing public access to points beyond the areas the road is intended to serve. Gravel or chip & seal road surfacing is typically acceptable.
6. Mountain – This category is appropriate for use on forest access roads, mountain roads, back roads, and other special use facilities. Gravel roads are most typical, but some roads have limited improvements or are "two-track" in nature.
7. Unimproved – This category is appropriate for roadways that are within a designated County right-of-way, but are not improved for most passenger vehicles. Access may be limited to OHV, horses, hiking or bicycling, or access may be restricted.

B. Planned Roadway Classification
Given the existing roadway conditions and the current classification of County roads, *Appendix 6.0 - Planned Road Conditions Classification* provides for a graphical reference to the County's planned roadway classifications.

2.2 County Roads in and adjacent to Municipalities

A. Municipal County Roads
1. County roads within municipal boundaries shall be designated with a roadway classification as designated within Table 2.1, but also identified with a –MC.
2. County roads within municipalities shall meet the minimum standards of Cache County, but may, through agreement with the affected municipality, be required to meet the road standards and requirements of said municipality.
3. Any development being serviced by County roads within a municipality shall require the approval of the County prior to the issuance of a building permit, encroachment permit, or change in land use requiring a permit or license from the municipality.

B. Municipal Annexation Areas
1. County roads that are adjacent to municipalities, within the declared annexation area of a municipality, and designated by the County Council as a municipal annexation road (–MA) may have their *Planned Road Conditions Classification* designated by a municipality by the agreement and consent of the County.
2. Any planned development activities related to the roadway on a municipal annexation road shall be reviewed by the affected municipality. The County shall review any comments or requests made by an affected municipality.

2.3 Roadway Sections

A. Roadway Typical Sections: All Cache County roadways shall comply with the design elements shown on the roadway typical section in Table 2.2. Traveled way width, shoulder width, and clear zone dimensions shall be based on the design speed, design year traffic volumes, and guidance found in the Appendix.

Table 2.2
Roadway Typical Sections

		Private[6]	Mountain Road [1,2],[6]	Rural[6]	Local	Collector	Arterial
Planned	Planned Design Limits - Approximate ADT	Under 30	Under 30	Under 30	30-1500	1500-5000	Over 5000
Minimum Width (feet)	Travel Lane [3]	10	12	10	10	11	12
	Right-of-Way	33	66	66	66	80	100
	Median/Turn Lane [4]	-	-	-	12	12	14
	Shoulder (each side)	0	0	2	5	6	8
	Paved Shoulder	0	0	0	1	3	3
	Road Surface Material[5]	Gravel (A)	Gravel (A)	Gravel (A)	Paved (B)	Paved (B)	Paved (C)

[1] Single lane roads may be permitted for Mountain roadways.
[2] Single lane roads do not provide adequate levels of service to development and may be required to meet the Rural road standard, provide pullouts, or other improvements as deemed necessary to provide adequate service provision in compliance with this standard, the County Code, and the latest edition of the International Fire Code.
[3] Minimum roadway is 2 lanes of traffic unless otherwise specified.
[4] Provided only where needed as determined by the County Engineer or a Traffic Impact Study
[5] Refer to Appendix Table A-8 Typical Cross Section Structural Values
[6] No commercial or industrial development shall be permitted.

B. Roadway standard structural cross sections shall comply with standard sections as shown in Table A-8 in the Appendix. The applicable structural section may be amended based on a review of the roadway by the Director. Consideration will be given to traffic volumes and general knowledge of site conditions. As an alternative, the proposed roadway structural section thickness design may be based on subsurface soil conditions and design year traffic volumes. Structural section thickness shall be determined by a licensed geotechnical engineer and approved by the County Engineer. A soils investigation shall be submitted that includes but is not necessarily limited to:
   1. Soil borings along roadway centerline and other areas as needed.
   2. Analysis on the overall bearing capacity of the soil.
   3. Recommendation for structural road cross section.
   4. Recommendation as to the requirements for land drains to adequately collect groundwater that may adversely affect development.
   5. Cut and fill slope requirements.
   6. Compaction requirements.

2.4 Improvements to County Roadways

A. Any and all improvements made to County roads or within County rights-of-way or roadway easements shall meet the minimum standards as adopted within the County Manual of Roadway Design and Construction Standards.
   1. Basic Improvement Requirements

a. All public roadways shall be identified and mapped (Appendix A5.0) by roadway functional classification (Section 2.1). Improvements made to roadways through the County's Capital Improvement Plan or by any other interested parties shall comply with the requirements established within this standard based on the functional classification for the roadway.
b. A primary access point for all development shall be identified based on current conditions and projected travel demand for the proposed development. A development may be required to provide multiple access points if it is deemed necessary for health, safety and welfare reasons.
c. No development shall be approved on inadequate roadways, public or private.
    i. Roads along the identified access to proposed development shall be required to meet the minimum roadway standards as outlined herein.
    ii. Development that is serviced by multiple substandard roads shall be reviewed on the ability of the entire road network providing service to said development. Substandard roadways that are not directly adjacent to a proposed development, but that still provide service to the development, shall be required to meet the minimum standards outlined in this section for development to be approved.
    iii. Unmanned utility facilities and agricultural structures are exempt from meeting the roadway standards. The facilities must provide appropriate access including easement/rights-of-way as needed.
d. Developer controlled property shall provide all necessary rights-of-way dedication along the frontage of any roadway.
e. Roadways shall be constructed across the entire frontage of the proposed development.

2. County Implemented Roadway Improvements
    a. All County roadway improvements shall be designated on the County's Capital Improvements Plan. Repair and emergency maintenance of roadways shall be completed at the discretion of the Road Superintendent. The County shall not maintain, improve, or cause any public funding to be expended on private roads within the County.
3. Improvements Required for Development:
    a. Private and Mountain Roads
        i. A roadway section, in conformance with Table 2.2, shall be required on all roads of the identified access that provide service to a proposed development.
        ii. Any substandard roads that provide the identified access to a development shall be fully improved to the minimum roadway standard.
    b. Rural, Local, Collector, and Arterial Roads
        i. Roadway travel lanes, in conformance with Table 2.2, shall be required on all roads of the identified access that provide service to a proposed development.
        ii. Full shoulder and clear zone improvements shall be made for the immediate frontage of any developing parcel as determined by the County Engineer.
        iii. At the discretion of the County Engineer and based on traffic volume and site/safety considerations, shoulder improvements and clear zone issues may be required to be addressed and completed on both sides of any affected roadway.
        iv. With the approval of Cache County the developer may offer alternative roadway improvements to the road network servicing a development. The County may accept alternative roadway improvements if they are deemed to

create a safer operational system, improve the access situation for the development and the general public, and meet the general intent of this Standard.

2.5 Roadway Layout

A. The arrangement, character, extent, width, grade, and location of all roadways shall be in conformity with the official Cache County Comprehensive Plan, regulations, this document, and any further plans adopted by the County and any applicable State and Federal laws. If geographical/geological conditions prevent this from being observed, any deviations must first be approved through the design exception process.

B. Where appropriate to the design and terrain, proposed roads shall be continuous and in alignment with existing planned or platted roads with which they are to connect and based on the grid system common to Cache County. Proposed new roadways shall be located appropriately to be placed and numbered on the historic block system grid, avoiding mid-block numbering where possible.

C. Provision for the continuation of existing roadways to adjoining areas (or their proper protection where adjoining land is not subdivided, insofar as such may be deemed necessary for public use by Director) shall be made in the arrangement of roadways in new developments. Where cul-de-sacs are proposed, the road and/or a road right-of-way shall be extended to the edge of the property to provide road connectivity and access alternatives for current, proposed, and future development.

D. The creation of looped through roads within the established roadway grid system will be encouraged wherever Director finds that such type of development will not interfere with normal traffic circulation in the area.

E. In order to promote road connectivity and mobility options, dead end roadways shall not be allowed except for cul-de-sac roads not exceeding 500 feet in length, and situations where the Director determines that topographic constraints will not allow through roads. Roads that are temporarily terminated in a cul-de-sac but are planned as through roads may be allowed under section 2.5(F). Reconfiguration of the proposed road layout may be required by the Director to provide through roads. Dead end roads, when approved, shall meet the following requirements:

    1. Length: Terminal roads shall not be longer than 500 feet from the centerline of the adjoining road to the center of the cul-de-sac.
    2. Cul-de-sac: A dead end road shall terminate in a circular turnaround or cul-de-sac consisting of a 48 foot radius paved surface and a right-of-way radius which allows for the shoulder improvements of the corresponding road section.
    3. Corner Radii: The corners at the entrances to the cul-de-sac shall have a radius of not fewer than 15' at the edge of the asphalt.
    4. Drainage Facilities: If surface water drains into the dead end road due to the grade of the road, then necessary catch basins, drainage systems and easements shall be provided.
    5. Utility & Pedestrian Easement: The County may require the reservation of up to a thirty-three foot (33') wide easement to provide for continuation of pedestrian traffic and utilities to nearby roads.

F. Temporary Dead End Roads: Temporary turnarounds shall be required on all roads which will be extended in the future and which exceed 300 feet or one lot in depth from the centerline intersections of the closest intersecting road.

    1. Temporary turnarounds shall consist of a forty-eight (48) foot radius all weather graded or paved surface.
    2. Additional rights-of-way or easements necessary to construct and maintain the

temporary turnaround are also required.

3. At such time that the temporary turnaround is removed due to adjacent improvements, a typical road section shall be constructed.
4. Temporary dead end roads shall have right-of-way sufficient to allow a planned continuation of the roadway and shall be required to extend a fully improved roadway section to the terminal end of the project site.

G. Service Roads: Roadways that are constructed to provide alternative access to high level roadway facilities or adjacent to difficult to cross areas (rivers, railroads, or other natural features)with the primary intent being to provide an adequate and safe method of providing access to properties that may otherwise have limited access options.

1. Where a development borders on or contains a railroad right-of-way or limited access highway right-of-way, existing or planned, Cache County may require a road approximately parallel to and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land.
2. When a development abuts or contains an existing or proposed collector, or arterial roadway, Cache County may require provisions for adequate protection of residential properties or to separate through and local traffic. These provisions may include:
    i. Limited access roads
    ii. Reverse frontage with screen planting contained in a non-access reservation along the rear property line
    iii. Deep lots with rear service alleys
    iv. Other treatment as may be necessary

H. Intersection Sight Distance: Intersection sight distance shall conform to the guidance in the latest edition of the AASHTO publication of A Policy on the Geometric Design of Streets and Roads.

2.6 Right-of-Way Encroachment Permits

A. A right-of-way encroachment permit issued by the Development Services Department is required for any person desiring to perform work in a County right-of-way or on County owned property. The base requirement for each permit is established in Table 2.3 Encroachment Permit Requirements. The decision by the County to issue a permit shall be based on, among other factors determined by the County, the following:

1. The capacity of the public right-of-way to accommodate the facilities or structures proposed to be installed in the public right-of-way.
2. The capacity of the public right-of-way to accommodate multiple utilities, such as electrical, telephone, gas, sewer, water, or other conduits or pipes.
3. The potential for damage or disruption, if any, of public or private facilities, improvements, or landscaping previously existing in the public right-of-way.
4. The public interest in minimizing the cost, and disruption of construction from numerous excavations in the public right-of-way.
5. Compliance with the County Roadway Standard.
6. Signing, flagging, detouring, traffic control, roadway surface impact and restoration, cleanup following construction, clear zone requirements, construction duration, contractor performance bonding, utility installation by use of tunneling, implementation of best management practices during construction, assumption of liability by licensee, and other site specific factors.
7. Any other restrictions or requirements as established by current Cache County ordinance(s) or any other considerations.

B. The permit holder shall assume liability and maintenance of utilities placed in the public right-of-way, including relocation or removal as may be determined by the County.

C. The permit holder shall forfeit the encroachment permit upon failure to comply with the conditions and stipulations of the encroachment permit. The County may require that the contractor's bond or other financial surety be utilized to finish the project, correct deficiencies created by the contractor, or to return the infrastructure to its pre-construction status.

D. Any person maintaining facilities within County rights-of-way may proceed with emergency work on said facilities if the circumstances demand the work be done immediately; provided that a permit cannot be reasonably and practicably obtained prior to commencing the work. Any emergency work shall conform to these Standards, and the person(s) doing the work shall immediately contact the County Road Superintendent or the County Engineer.

E. Inspection of Construction: The County shall cause the inspection of roadway, access, utility, or other development to be inspected as deemed necessary. Any costs associated with the inspection process shall be paid by the developer of the improvements. The County has the right to require the correction of construction deficiencies that fail to meet this standard or generally accepted construction standards. The County may refuse to accept any infrastructure improvements that fail to meet this standard and can cause the correction or reconstruction of said infrastructure.

F. Licensed and Bonded Contractor Required:
   1. The contractor performing the proposed work shall be licensed and bonded to perform the type of work proposed. A performance bond for a one year term in the amount equivalent to the value of the proposed work shall be posted naming the County as owner.
   2. If corrective action pertaining to permitted work is necessary, the County shall request the contractor to perform such work at no cost to the County. If a favorable response is not received in a reasonable time frame the County will call upon the bond to complete the work.
   3. The County may inspect and approve project components as deemed necessary.
   4. The County may waive this requirement if it is deemed to not be necessary.

Table 2.3
Encroachment Permit Requirements

Mountain Road	Permit Required	Traffic Control	Inspection	L/B Contractor Required
Minor Work	Yes	TBD	TBD	TBD
Major Work	Yes	Yes	Yes	Yes
Rural Road				
Minor Work	Yes	TBD	TBD	TBD
Major Work	Yes	Yes	Yes	Yes
Local, Collector, or Arterial				
Minor Work	Yes	TBD	TBD	TBD
Major Work	Yes	Yes	Yes	Yes

Minor Work	Agricultural Access, Driveway Access, placement of mailboxes/fences etc., other work that does not impact the traveled way.
Major Work	Road rebuild or widening, resurface, shoulder or drainage work, new road construction, road cut for utilities.
TBD	The County Engineer shall provide a determination as to the need for various portions of the permit based on the work being performed.

2.7 Right-of-Way Encroachments

Third party obstructions that currently exist within the County's right-of-way that do not comply with this standard shall be allowed to remain unless it is determined by the County Engineer that said obstruction creates an unreasonable safety hazard to the traveling public or infringes substantially on the ability of the County to safely utilize its right-of-way. The County does not assume liability for obstructions that are built or placed within the County's right-of-way or easement that are not in compliance with this standard. All new right-of-way encroachments shall comply with the following standards:

A. Mailboxes: Standard USPS approved type mail boxes may be located within the public road right-of-way providing that:
    1. The preferred mounting post shall be a standard 4" x 4" wood post.
    2. A decorative mounting post may be used that is not considered a hazard to the traveling public as determined by the County Engineer, and will have similar break away characteristics of a 4" x 4" wood post when struck by a passenger vehicle.
    3. The County shall not be liable for damage to mailboxes created by snowplowing or other maintenance operations.

B. Fences: Fences separating the public roadway from adjoining properties are subject to the following:
    1. Fences shall be owned and maintained by the adjoining property owner.
    2. Fences shall be located on the right-of-way line except when:
        i. It is determined to be in the County's interest to locate the fence within the public right-of-way, or
        ii. It is determined that the adjoining property owner may effectively utilize the public right-of-way without creating a hazard to the traveling public. At no time shall the fence be located within the clear zone of the roadway as determined by the County Engineer.
        iii. The fence being proposed is constructed in a manner as to make it temporary or easily moved. The preferred fence shall be four strand standard barb wire fence. Decorative fences are not permitted to be constructed within County rights-of-way.
    3. The County shall not be liable for damage to fences created by snowplowing or other maintenance operations.
    4. The property owner is responsible to relocate the fence when requested by the County. The County may replace or relocate barbed wire fences.

C. Street Trees or Shrubs: Trees and shrubs to be planted on the public right-of-way (area between property line and the road) will be determined on a case-by-case basis. Factors to be considered will include, but not be limited to, interference with or impact upon sub-surface infrastructure, overhead utilities, visibility, and subsequent maintenance. Allowed plants, trees, and shrubs will become the property of the County at the expiration of twelve months from planting; however, the adjacent property owner is required to maintain the flora.

D. Waste Container Pads – Along county roads where insufficient space is present to safely locate waste containers outside of the travel lanes, gravel pads shall be required for each single family home or business. A standard pad size for residential waste containers shall be four (4) feet deep by eight (8) feet long, measured a minimum of one (1) foot from the travel lane, constructed to the minimum standards of the roadway shoulder. In situations where dumpsters or joint access locations are proposed, the pad size and construction shall be approved by the Director with input from Service Area 1.

2.8 Road Naming Conventions & Addressing Standards

A. Newly built roads which follow the grid system shall be assigned the numeric value of the address gridline with which they most closely align. Newly constructed roads shall be located on either a full '100' block designation or an inter-block '50' designation.

B. Newly built roads that do not conform with the grid system, e.g. a diagonal road or a road which winds or changes direction without intersection, shall not be assigned a grid value, but shall be named. Addresses on that named road should be numbered sequentially from one end to the other without particular regard for their approximate grid location.

C. Addressing of subdivision lots and homes shall be completed by the Cache County Development Services Office.

1. Addressing shall be assigned to all new construction at the point of issuance of a building permit, with the address being assigned at the center point of the driveway connection to the road.
2. For subdivision lots, addressing shall be assigned to the middle of the road-facing side of the lot. Where a lot is greater than one (1) acre or where multiple frontages may be used for access, addressing will not be assigned at the point of subdivision, but will be issued at the time of building permit issuance.
3. Addressing shall be assigned based on an overlay grid rule of eight (8) blocks to a section, with every block containing 100 numbers. The address number is determined by measuring from the nearest grid lines, using the addressing rule of a number change for every 6.6 feet. The standard rule of addressing with even and odd numbering is as follows:
   a. Even Numbers:
      Structures on East side of the road, facing West
      Structures on South side the road, facing North
   b. Odd Numbers:
      Structures on the West side of the road, facing East
      Structures on the North side of the road, facing South

D. Non-Conforming Roads and Addresses

Where conditions exist that do not meet the standards set forth herein, or where roads or structures have been incorrectly assigned an incorrect numerical address, the Development Services Department will attempt to issue a correct address for new roads/lots, but will not rename/renumber historically inaccurate roadways unless it is practical or necessary to do so.

2.9 Miscellaneous

A. Survey Monuments: Permanent survey monuments shall be accurately set and established at the intersections of centerlines of roads within the development and intersections with centerlines of existing roads and the beginning and ends of curves on centerlines or points of intersections or tangents. All permanent survey monuments shall remain in place, or be reset at the developer's expense when approved by the County Engineer, after the roadway pavement and related improvements are installed. All development plans shall be tied to a section corner or monument of record, as established by the Cache County Surveyor.

B. Bridges & Culverts: Design and construction of new bridges, box culverts, or other spanning structures shall be approved in advance by the County Engineer. For bridges identified as essential structures to the County, the County may participate financially, and in the case of a bridge required to serve only a development, the developer shall pay the total cost of construction. The developer shall comply with all the conditions imposed by the County relative to the bridge location, design & construction. All bridge design shall be according to the American Association of State Highway and Transportation Officials (AASHTO) design

guidelines and performed by a professional engineer as per applicable state laws.

C. Environmental Permits: Any permits or clearances required for the proposed development shall be the responsibility of the developer. Permits may include, but not be limited to, the following:
    1. Stream Alteration Permit issued by the State Engineer's Office for stream alterations, or encroachments.
    2. Individual or Nationwide Permit for Waters of the US issued by the US Army Corps of Engineers for impacts to wetlands and navigable waterways.
    3. Utah Pollutant Discharge Elimination System issued by the State Department of Environmental Quality for construction activities disturbing more than one acre. In addition the developer shall comply with the Utah Noxious Weed Act and the Cache County Noxious Weed Policy.

3.0 IRRIGATION WATER FACILITIES DESIGN

3.1 General

A. All design and construction must comply with the requirements and standards of the applicable irrigation company and Cache County.

B. Relocation or modification of irrigation facilities shall be approved by the affected irrigation company. The County shall require that a letter of approval, signed by an authorized agent, be provided by the irrigation company.

C. Existing irrigation ditches or canals may be required to either be piped or fenced on both sides when adjacent to or contained within property to be developed.

D. Rights-of-way and/or easements for irrigation company owned facilities on developer's property shall be provided by the developer. Right-of–way/easement width must meet irrigation company requirements.

E. Minimum horizontal clearance between an open irrigation line and other utilities shall be at least sixteen and one-half (16.5) feet. Closer tolerances require piping of the irrigation system or other design alternative, and requires approval from the affected irrigation company.

F. Co-location of utilities with an irrigation company facility shall have irrigation and utility company concurrence.

4.0 STORM DRAINAGE DESIGN

4.1 General

A. Post-development peak runoff rates, including sheet flow, shall not exceed pre-development peak rates. County approved storm drainage and detention facilities will be required to meet this Standard.

B. No drainage facility may be directed to or flow into County rights-of-way, easements, or property.

C. All storm water facilities must adequately handle run-off from the site development, as well as all upstream contributing flows for specified storm events.

D. A drainage system shall be designed to:

1. Accept all natural drainage patterns and channels and create no adverse impact on downstream properties.
2. Accommodate all off-site storm water flows that enter the development site under the influence of natural drainage patterns.
3. Convey discharge surface waters to the flow line of an existing watercourse or an adequate existing underground or above-ground conveyance system with appropriate permits as required
4. If an existing irrigation system is used as part of a storm water collection system or outfall system, obtain permission and concurrence from the irrigation system operators/owners for such use.
5. Control storm water discharge rates not to exceed the pre-development flow rate.
6. Accommodate the design flows created by a 10-year return intensity storm event.
7. Base storm water flows on the appropriate small area or larger area run-off calculation technology.
8. Comply with the County Storm Water Management Program as applicable.
9. Comply with Clean Water Act requirements for allowable pollutant levels in discharge flows.
10. Comply with the Cache County Water Master Plan.

E. Storm drainage design shall consider the provision of drainage easements for off-site contributory run-off through the site, and allow future improvements of adjacent developments.

F. A new discharge of concentrated storm water from a pipe, culvert, channel, or other drainage structure shall not be created through lands of another property without first obtaining a permanent storm drainage easement and constructing a channel to guarantee continuity of an outfall from the point of discharge to the nearest natural or man-made watercourse with appropriate permits as required.

G. If off-site downstream construction and easements are required to construct an adequate channel outfall, no plans shall be approved until such storm drainage easements have been obtained and recorded. Conditional approval may be granted upon review of the plans prior to the securing the easements or rights-of-way.

H. If the installation of a storm water system requires publicly owned easements, the developer shall convey such easements by deed to Cache County.

I. Storm water design and construction methods must adequately address potential problems which may arise during construction or by design so as not to pollute, erode, or deposit sediment or cause any other degradation to existing natural conditions. Oil and grease separation devices shall be used in conformance with requirements of the Clean Water Act. A feasible plan for device maintenance shall be provided.

4.2 Road Drainage

A. Roads shall be designed for a minimum storm frequency of a ten (10) year return period.
B. The design spread for a ten (10) year event shall be limited so that all traffic lanes in each travel direction shall be kept free of flooding.
C. No concentrated flow greater than one (1) cubic foot per second shall cross a pedestrian pathway or sidewalk.
D. Roadway facilities that cross streams or other flowing water shall be designed to handle a storm frequency of a one-hundred (100) year return period within the road right-of-way or easement to reduce flooding of adjacent properties and to maintain channel integrity on either side of the roadway.

4.3 Storm Sewers

A. Storm sewer trunk lines and laterals shall be designed to adequately handle run-off from a ten (10) year storm.
B. The hydraulic gradient of storm sewers for the post-development shall be lower than the grate inlet top elevation at all points.
C. If easements are necessary for the installation and maintenance of public storm sewer systems such easements shall be a minimum of 20 feet in width with the storm sewer line centered within the easement. No buildings, utilities or structures shall be erected or constructed within such easements as to interfere with the activities necessary to properly access and maintain or replace such lines or storm sewer structures.
D. Allowable storm sewer pipe material is as follows:
    1. Concrete (reinforced or non-reinforced)
    2. High Density Poly Ethylene (HDPE)
    3. Corrugated Metal Pipe (CMP)
E. Storm water inlets shall be industry standard approved.
F. Pipe size shall be determined by required capacity but in no instance shall the minimum mainline size be less than 15" diameter.
G. Cover over storm drain facilities shall be sufficient to adequately protect such facilities from potential loadings either during construction or final finished surface.
H. Minimum clearance between storm drain facilities and other buried utilities shall be at least 18 inches.
I. Test pits will be required and shall be shown on the plans for all storm drain crossings which involve gas lines, water mains 12 inches in diameter and larger, sanitary sewer crossings, and all fiber optic telephone service lines.
J. Storm drain lines shall be installed with no horizontal or vertical deflection, unless authorized by the County Engineer.
K. Storm Sewer manhole spacing shall be 350 feet maximum.
L. Storm Sewer manholes shall be four (4) feet in diameter for in-line manholes where grade changes occur. Five (5) foot diameter manholes are required when deflection angle is greater than or equal to 45 degrees, when the manhole is a junction manhole of three or more lines, for sewers whose inside diameter is 15" or greater, or when the cover above invert elevations is 14 feet or greater. All manholes shall be constructed with steps for maintenance access.
M. All storm sewer taps, either public or private, into existing storm sewer piping shall be limited to 4" and 6" and shall be constructed by the contractor and inspected by the County Engineer. All connections greater than 6" shall require a storm drain manhole to be constructed.

4.4 Subsurface Drainage and Drainage Swales

A. When connected to the storm sewer allowable Sub-Drain pipe materials are as follows:
   1. Concrete (reinforced or non-reinforced)
   2. HDPE (High Density Polyethylene) for service laterals only
   3. Corrugated Metal Pipe (CMP)

B. When connected to the storm sewer install magnetic locator tape 12 inches below finished grade centered along the subsurface drainage pipe alignment.

C. If drains are used around building foundations, a typical section and layout of the peripheral drain shall be shown on the development plan and on individual grading plans. The upper end invert shall be a minimum of six inches (6") below the finished grade of the basement floor and laid at a minimum grade of two percent (2%).

D. Subsurface drainage lateral material shall be HDPE and shall be clearly marked with identifiable tape or other approved methods in order to avoid confusion with other drainage systems. Connections to the mainline shall be accomplished via adapters provided by the manufacturer.

E. Subsurface drainage manholes shall be 4' diameter for in-line manholes where grade changes occur. Five foot (5') diameter manholes are required when deflection angle is greater than or equal to 45 degrees, when the manhole is a junction manhole of three or more lines, for sewers whose inside diameter is 18 inches or greater, or when the cover above invert elevations is 14 feet or greater. All manholes shall be constructed with steps for maintenance access.

F. Sumps and drainage swales designed as part of the development's detention systems shall only be allowed when approved by the County Engineer and only when no available outlet exists and the soil conditions are such that they will adequately permit the water to infiltrate properly. In areas within a well or spring protection zone, sumps and drainage swales will be allowed only when found to be acceptable under the current Drinking Water Source Protection Plan, or the owner of the water source being protected agrees that the storm water disposal facilities can be accommodated in the next updating of the Drinking Water Source Protection Plan.

G. The capacity of sumps and drainage swales can only include the cross sectional area in calculating the required storage volume available. Percolation tests submitted by the developer must demonstrate that sumps and drainage swales can adequately dissipate the generated storm run-off in a reasonable time period.

H. Drainage swales may be utilized on County roadways. Drainage swales shall meet the following guidelines:
   1. Meet the same design criteria as retention basins
   2. Side slopes do not exceed 3:1 in steepness
   3. Swales do not exceed 18" in total depth
   4. Swales do not extend below the natural water table
   5. Swales will not support wetland vegetation under normal conditions
   6. Vegetation in the swale shall be maintained by the adjacent property owner.

4.5 Channels and Culverts

A. Channels and culverts shall be designed to adequately handle run-off from a 50-year storm.

B. Culverts and Channels shall be designed in accordance with the UDOT Roadway Drainage Manual of Instruction.

C. The sides of all conveyance channels shall be extended until a minimum of six inches of free board (distance from water surface to top of bank) is provided above the 50-year event water surface elevation within the conveyance channel.

D. Conveyance channels with side slopes steeper than 3:1 (Horizontal/Vertical) shall be stabilized by paving, riprap, gabions, or other approved measures.
E. The minimum conduit diameter for culverts shall be 18 inches.
F. Culverts shall be designed and installed to account for ultimate right-of-way and road widths.
G. Culvert design calculations shall include exit velocities.
H. Culvert exit velocity shall be consistent with the maximum velocity in the natural channel or shall be mitigated by using energy dissipation devices and / or channel stabilization in accordance with the UDOT Roadway Drainage Manual of Instruction.
I. Flared end sections shall be installed at the open ends of all drainage pipes.

4.6 Detention / Retention Facilities

A. Detention basins shall be designed to detain post development condition run-off to precondition run-off during a 10-year storm and to safely pass a 100-year storm while maintaining at least one foot (1') of freeboard.
B. Basin outflow shall be limited to the maximum rate which maintains the adequacy of the channel and shall not exceed the pre-development rate of flow to the specific point of concentrated discharge, not the pre-developed flow from the entire drainage area. Under no circumstances shall an outlet flow exceed 0.2 cfs/acre for a 10-year storm event. If a channel does not exist at the point of discharge, then a channel shall be constructed to convey the drainage to a stable outlet.
C. Detention and Retention basins shall be designed with an emergency overflow for events greater than the 100-year storm event that safely conveys flood waters to an acceptable facility.
D. Hand or computer generated routing calculations are required along with inflow and outflow hydrographs.
E. The use of pumps to drain detention facilities shall not be allowed.
F. Minimum conduit diameter for basin outlets shall be 18 inches. Lesser orifice sizes for flow control shall be provided with a manhole or other acceptable structure fitted with the required orifice.
G. Safety measures shall be incorporated into the design of all storm water detention facilities. These may include, but are not limited to safety ledges, fencing, warning signs, anti vortex devices, stadia rod indicating depth at the lowest point, and outlet structures designed to limit public access.
H. All detention facilities must comply with current Clean Water Act requirements.
I. Detention basins may be designed to provide the following:
    1. Side slopes of 3:1 maximum.
    2. All weather vehicular maintenance access around the entire basin (min. ten foot (10') widths).
    3. Lot shall provide normal frontage requirements.
    4. Flow through design which eliminates "wet basin".
    5. Cross slope within basin shall provide adequate drainage. Under no circumstances shall the slope be less than 1% across any portion of the basin.
    6. All detention lots or easements shall be properly surveyed and corners permanently marked prior to acceptance of improvements.
J. Detention facilities shall be constructed on a parcel that will not be maintained by Cache County. Easements and provisions allowing access to the inlet and outlet structures by the County shall be required. The decision to accept a detention lot as County property shall be made by the County Council.
K. Retention (infiltration) systems will be considered for review only if a Soils and Geo-Technical Report is provided which discusses soil permeability, potential effects on ground

water, and potential effects on underlying geologic strata. A percolation test will be required to determine the capacity of retention basins. Basin capacity must be based on the infiltration rate, drainage area, and a 50 year storm event. In areas within a well or spring protection zone, sumps, and drainage swales will be allowed only when found to be acceptable under the current Drinking Water Source Protection Plan or the owner of the water source being protected agrees that the storm water disposal facilities can be accommodated in the next updating of the Drinking Water Source Protection Plan.

5.0 ACCESS MANAGEMENT

5.1 General

Access to County roadways from adjoining properties is managed according to the following regulations to maintain the safety and operational characteristics of the County roadway system. Each County roadway is assigned an access category and category assignments are shown in Appendix 5.0.

5. 2 Minimum Access Spacing

To maintain safe and effective transportation corridors, Cache County limits the access of roads (private or public), homes, and businesses to all roadways. Table 5.1 designates the spacing requirements for all County roads. Road Access refers to any public or private road, either a full or partial movement intersection. Commercial Access is access to any commercial or industrial business, excluding a small business as defined in Title 17 of the Cache County Code. Residential/Farm Access refers to any home, farm structure, cabin, or other accessory structure. Minimum spacing includes all access points and road intersections on both sides of the roadway.

Table 5.1
Cache County Access Management Standards

Level-of-importance		Minimum Spacing Standard (Feet) [1]		
		Road Access	Commercial Access	Residential/Farm Access
A	Arterial	660	350	350
C	Collector	350	200	200
L	Local	300	150	10[1]
R	Rural	300	Not Permitted	10[1]
M	Mountain Road	300	Not Permitted	10[1]

[1] Minimum spacing from an intersection shall be 80 feet.

5.3 Criteria for Granting Access

A. The number and location/spacing of access points allowed is based on the Category of Roadway, the minimum spacing standards as set forth in Table 5.1 Cache County Access Management Standards, and the following:
   1. When application is made, access to a roadway may be granted if reasonable access cannot be obtained from the lower classification roadway.
   2. A determination of reasonable access from a local road or road should include consideration of the road function, purpose, capacity, operational and safety conditions, and opportunities to improve the road.
   3. Direct access to a higher functional roadway classification will be approved if the alternative access will create a significant operational or safety problem at the alternative location and the direct access to the roadway will not cause a significant problem.
   4. Cache County may limit access points beyond that which is allowed in Table 5.1 if the County establishes that the access will create a significant safety or operational problem or the access does not meet acceptable design standards including spacing.

B. The minimum spacing of all intersecting public ways and other significant accesses that will be full movement intersections is 660 feet. Where it is not feasible to meet 660 feet of spacing

a design exception and traffic study will be required. Spacing to nearby intersections must be sufficient to accommodate the future year left turn and through vehicle storage queues for both turning movements. The access location shall also meet other access spacing, design, and need requirements.

5.4 Driveways

Table 5.2
Cache County Driveway Standards

		Residential	Commercial / Industrial[1]
Dimension within Right-Of-Way	Minimum Access Width	10'[2]	24'
	Maximum Access Width	24'	36'
	Minimum Surfacing Thickness (within the County ROW)		
	Gravel Road	6" Gravel	NA
	Paved Road	3" Bituminous	6" Bituminous
	Road with Concrete Curb and Gutter	6" Concrete	8" Concrete
	Minimum Base Course	4"	4"

[1] Does not include small businesses as defined by Title 17 of the County Code.
[2] Minimum may be increased by international fire code requirements.

A. All driveway standards herein are for the portion of the driveway within the County right-of-way only. These standards do not impose requirements on driveways connecting to private roads or for the portions of driveways not within County right-of-way. All driveways shall meet the requirements of the most current and adopted International Fire Code.
B. Driveway Location: Driveways for all uses except single-family homes shall not be closer than eight (8) feet to an adjacent interior property line. Accesses for single family homes may be granted within two (2) feet of the property line. All driveways shall be set back a minimum of eighty feet (80') from any intersection.
C. Common Driveways: Driveways along the property lines may be installed for common use of both adjacent properties only upon approval by the Director and guaranteed by a recorded access agreement.
D. Driveway Access Design
    1. Driveways that access a County road shall be reviewed by the Director to determine the need, sizing, and placement of a culvert.
    2. Driveways that access a County road that have concrete curb and gutter shall not use a bridge to span the gutter, but rather shall complete the access using a curb cut.

5.5 Access to State Roads

Any new access, existing access that is being altered, change in land use that utilizes an existing access, or any work within the right-of-way of a State facility is required to obtain the appropriate permits from the Utah Department of Transportation (UDOT) – Region 1. Cache County requires that the applicant for a UDOT permit attend a pre-coordination meeting, referred to as the Cache Access Management Program (CAMP), between the Cache Metropolitan Planning Organization (CMPO), UDOT Region 1, and Cache County.

APPENDIX

A1.0 Standards for Construction Drawings

The following instructions are for the purpose of standardizing the preparation of drawings to obtain uniformity in appearance, clarity, size, and style. These plans and designs shall meet the standards defined in the specifications and drawings herein outlined unless approved otherwise. The minimum information required on drawings for improvements are as follows:

All drawings and/or prints shall be clear and legible and conform to good engineering and drafting practice, on 24" X 36" or 11" X 17" sheets as approved by the County Engineer.

A. In general, the following shall be included on all drawings:
   1. North arrow (plan)
   2. Scale, written and graphic: 1" = 40' horizontal, 1" = 4' vertical (other appropriate scales as approved by the County Engineer)
   3. Elevations referenced to the NAD 83
   4. Stationing and elevations for profiles
   5. Location map
   6. Index map
   7. General and Construction notes
   8. Title block, located in lower right corner of sheet to include:
      i. Name of County
      ii. Project title (subdivision, etc.)
      iii. Specific type and location of work
      iv. Signature block for approval signature of County Engineer and date
      v. Name, address, phone number, etc. of engineer or firm preparing drawings with license number, stamp, and signature
   9. Details at 1" = 10' or other appropriate scale to adequately provide required information

B. Roadway surfacing drawings, and pedestrian paths or sidewalks shall show:
   1. Plan and profile views must be shown for centerline of road.
   2. Cross sections at 50-foot intervals showing existing ground, proposed roadway template, cut/fill slope catch points, and right-of-way
   3. All existing elevations shall be shown in parentheses
   4. Include stationing, centerline elevations, and curve data
   5. Flow direction and type of drainage structures with adequate flow line elevations
   6. Typical cross section for all roadways and variations
   7. 100' minimum of existing plan and profile design when connecting to existing improvements
   8. 300' minimum of future plan and profile design when roadway is to be extended (must also include 300' of existing profile along future rights-of-way lines)
   9. Soil Boring Log along roadway centerline if required by County

C. Storm drainage drawings shall show:
   1. Minimum scale: 1" = 40' horizontal, 1" = 4' vertical
   2. Location, size and slope of mains, and lateral connections
   3. Location, size and details of inlets, junction boxes, etc.
   4. Stationing of manhole center lines, lateral connections, and crossings
   5. Manhole size, location and flow line elevation, lid elevations
   6. Design flow rate (10 yr. storm), hydraulic grade line and velocity (all indicated in profile for each pipe section)
   7. Type of mainline pipe
   8. Outfall or receiving waters identification.

D. Roadway, Drainage, and Grading Plans
    1. Plans showing site general layout and drainage patterns
    2. Roadway plan drawings shall show cut/fill catch points
    3. Cut and fill lines shall be labeled accordingly
    4. Spot elevations of final grades
    5. Finished grade contours at one foot intervals
    6. Detention facility details including: inlets, outlets, and piping facilities with final elevations
    7. Calculations to substantiate design (include in submittal but not to be included on plans)

E. Erosion Control Plans
    1. Plans showing site general layout and drainage patterns and outlets for water exiting construction site
    2. De-silting basin details including inlets, outlets, and piping facilities
    3. Calculations to substantiate design (include in submittal but not to be included on plans)
    4. Erosion control construction notes
    5. Plan shall include an emergency phone number and name of the developer's responsible person who will be available 24 hours a day if an emergency situation arises
    6. Re-vegetation plans of disturbed soils
    7. Notes indicating compliance with Storm Water Pollution Prevent Plan and noxious weed control regulations

A2.0 Geometric Design Criteria

A. Design Traffic Volume: Roads shall be designed for a specific traffic volume that is based on the average daily traffic (ADT) volume projected to a 20 year design future. Upon approval from the Director, the design year may range from the current year to 20 years depending on the nature of the improvements.

B. Design Speed: The design speed is a selected speed used to determine the various design features of the roadway. Geometric features should be consistent with a specific design speed selected as appropriate for site conditions and anticipating the speed of vehicles using the roadway. Low design speeds are generally applicable to roads with winding alignment in rolling or mountainous terrain. High design speeds are generally applicable to roads in level terrain. Intermediate design speeds would be appropriate where terrain, roadside development conditions, and environmental conditions would support moderate roadway speeds. Table A-1 lists values for minimum design speeds as appropriate for traffic needs and types of terrain.

Table A-1 Minimum Design Speeds for Cache County Roads

Type of Terrain	Design Speed (mph) for specified design volume (veh/day)					
	under 50	50 to 250	250 to 400	400 to 1500	1500 to 2000	2000 and over
Level	30	30	40	50	50	50
Rolling	20	30	30	40	40	40
Mountainous	20	20	20	30	30	30

C. Sight Distance: Minimum stopping sight distance and passing sight distance should be as shown in Table A-2 and Table A-3. These tables provide characteristics of vertical curves allowing adequate sight distances based on traveling speed.

Table A-2

Design Controls for Stopping Sight Distance for Crest and Sag Vertical Curves

Initial Speed (mph)	Design Stopping Sight Distance (feet)	Rate of Vertical Curvature, K[a] (ft%)	
		Crest	Sag
15	80	3	10
20	115	7	17
25	155	12	26
30	200	19	37
35	250	29	49
40	305	44	64
45	360	61	79
50	425	84	96
55	495	114	115
60	570	151	136

Table A-3

Design Controls for Crest Vertical Curves Based on Passing Sight Distance

Initial Speed (mph)	Design Passing Sight Distance (ft)	Rate of Vertical Curvature, Ka (ft/%)
20	710	180
25	900	289
30	1090	424
35	1280	585
40	1470	772
45	1625	943
50	1835	1203
55	1985	1407
60	2135	1628

D. Roadway Grades: Maximum roadway grades are shown in Table A-4:

Table A-4 Maximum Grades for Cache County Roads								
	Maximum Grade (%) for specified design speed (mph)							
Type of Terrain	15	20	25	30	40	50	55	60
Level	9	8	7	7	7	6	6	5
Rolling	10	10	10	10	10	8	7	6
Mountainous	10	10	10	10	10	10	9	8

E. Alignment: Horizontal and vertical alignment between control points should be designed to be as favorable as possible consistent with environmental impact, topography, terrain, design speed, design traffic volume, and the amount of reasonable obtainable right-of-way. Sudden changes between curves of widely different radii or between long tangents and sharp curves should be avoided. Where crest vertical curves and horizontal curves occur together, there should be greater than minimum sight distance to ensure that the potential hazards are visible to approaching drivers. Table A-5 lists minimum radius of horizontal curves with respect to design speed for Cache County roads. Curve data is required for all roadway centerlines.

Table A-5 Minimum Horizontal Curve Radius for Cache County Roads											
Design Speed (mph)	10	15	20	25	30	35	40	45	50	55	60
Curve Radius (ft)	16	42	86	154	250	371	533	711	926	1190	1500

If possible, the horizontal alignment shall be tangent through intersections, but where horizontal curves cannot be avoided, the following shall be observed:

1. Use a curve of sufficient radius to provide adequate sight distance and eliminate the need for super elevation. Under no condition shall the curve radius be less than that required for the road classification.
2. Curves should not begin or end within an intersection.
3. Eliminate angle points in excess of two degrees (2°) on intersecting roadways by use of a large radius curve.
4. Angle points up to five degrees (5°) are permissible at the intersection of two residential roads.
5. Curve radii and super elevation shall consider the design speed for the given road.

F. Landings - A landing is defined as the area between the through road roadway and the point at which the side road grade begins to exceed 3%. The required minimum lengths of the landings are as follows:

1. Arterial 200 feet
2. Collector 100 feet
3. Local/Rural 50 feet
4. Cul-de-sac 25 feet

G. Roadway Intersections:

1. Number of Roadways: Conventional at grade intersections shall not be designed to

accommodate more than two (2) roadways or four (4) corners. If additional intersecting roadways are necessary, a roundabout intersection design may be appropriate.

2. Intersection Angle: Roadways shall intersect at a ninety degree (90°) angle, or as near to a right angle as practicable, but shall not to exceed a ten degree (10°) deviation.
3. Corner Radii: Roadway intersections shall be rounded with the minimum radii measured at the edge of asphalt:
    i. 25 feet for local/rural roads
    ii. 30 feet for arterials and collectors
4. Roundabouts: Roundabouts shall be designed following Federal Highway Administration's publication No. FHWA-RD-00-067 "Roundabouts: An Informational Guide" and the Guide & Manual on Uniform Traffic Control Devices (MUTCD). Concept shall be approved in advance by the Director.

H. Cross Slope: Pavement cross slope shall be adequate to provide proper drainage.
    1. Asphalt surfaced roadways shall have cross slopes ranging from 1.5 to 2 percent.
    2. Gravel surfaced roads shall have a 3 percent cross slope.
    3. Cross slopes may vary based on the specific project conditions, but shall be approved by the County engineer.

I. Super Elevation: The maximum super elevation rate for Cache County roadways is 8%.

J. Width of Traveled Way and Shoulder
    1. Graded shoulder width is measured from the edge of the traveled way to the point of intersection of shoulder slope and fore slope as shown on the typical roadway section drawing.
    2. The minimum roadway width is the sum of the traffic lanes, median, auxiliary lanes, and graded shoulder widths given in Table A-6. Where roadside barriers (guardrail) are proposed, it is desirable to provide a minimum offset of 4 feet from the traveled way to the barrier when practical.

K. Median: Need and justification for a two-way left turn median shall be determined by the Director. The median shall be placed in the travel way and equally placed on the roadway centerline. The travel way width is increased by the amount of median width. See Figure A-7.

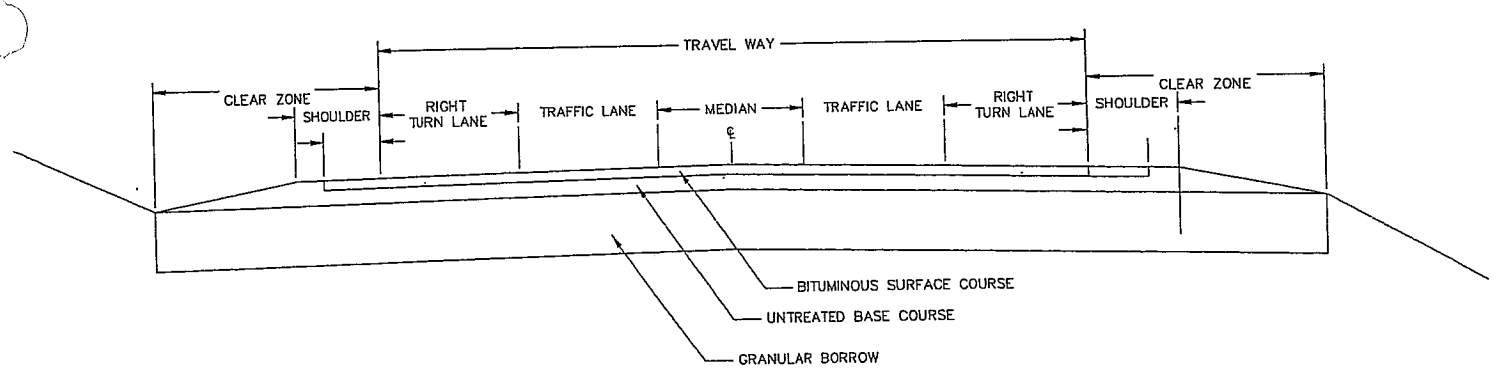
L. Auxiliary Turning Lanes: Auxiliary left and/or right turning lanes shall be included in the roadway typical section when required. See Figure A-7.

M. Horizontal Clearance to Obstructions: A clear zone of 7 feet or more from the edge of traveled way that is appropriately graded is required for roadway design speeds less than 40 mph. Clear zone widths for roadways with design speeds for 40 mph and greater shall comply with the AASHTO Roadside Design Guide, latest edition. See Figure A-7.
    1. An exception may be made where guardrail protection is provided.
    2. The clear zone area shall be clear of all unyielding objects such as trees, sign supports, utility poles, light poles, and any other fixed objects that might severely damage an out-of-control vehicle.
    3. Drainage and irrigation ditches shall not be within the clear zone area.

Table A-6
Typical Cross Section Minimum Standards

	Roadway Classification Design Speed (mph)	Minimum Width of Traffic Lanes (ft) for Specified Design Volume (ADT)				
		Mountain	Rural	Local	Collector	Arterial
		Under 50	Under 200	200 to 1500	1500 to 5000	0ver 5000
	15/20	12	10	-	-	-
	25	12	10	10	-	-
	30	12	10	10	11	-
	40	-	10	10	11	12
	45/50	-	10	11	11	12
	55 +	-	11	11	12	12
Minimum	R/W Width	66	66	66	80	100
Minimum	Median Width	-	-	12	12	14
Minimum	Right Turn Lane	-	-	12	12	12
Minimum	Shoulder Width	0	2	5	6	8

Figure A-7
Typical Cross Section



N. Gravel Road Structural Construction
   1. All work shall be verified by an independent soils testing materials technician acceptable to the County. The materials technician shall provide certification of each phase of the completed work to the County.
   2. Topsoil and organic material shall be excavated from the roadway alignment area to a depth and width to accommodate the placement of sub base materials.
   3. Underlying soils shall be proof rolled with a vibratory compactor roller. Adequate rolling and compaction of soft areas shall be verified by observation by the materials technician.
   4. Geotextile reinforcement shall be placed in saturated or soft soil areas as deemed necessary by the County Engineer.
   5. Compacted granular borrow shall be placed to the specified depth and width in accordance with Table A-8. The soils technician shall verify proper gradation, placement, and compaction of the material.

6. Compacted untreated base course shall be placed to the specified depth and width in accordance with Table A-8. The soils technician shall verify proper gradation, placement, and compaction of the material.

Table A-8
Typical Cross Section Structural Values

Typical Section	Bituminous Surface Course (BSC)	Untreated Base Course (UTBC)	Granular Borrow (GB)
A	0	8	10
B	2.5[1]	8	10
C	4	8	10

[1]Double Chip & Seal coat may be utilized based on traffic volume and engineering requirements.

O. Chip & Seal Surfacing Standards
1. All work shall be verified by an independent soils testing materials technician acceptable to the County. The materials technician shall provide certification that the following requirements were met at each phase of the completed work to the County.
2. Complete all work between May 15 and August 31.
3. Place seal coat when road temperature is at least 70° F, air temperature is at least 50° F, and forecasted temperature is not expected to be below 40° F within three (3) days after placement.
4. Use a self-propelled aggregate chip spreader specifically designed and manufactured for chip seal operations with gates to drop the correct amount of aggregate, plus or minus one (1) pound per square yard.
5. Use articulating type pneumatic roller weighing between six (6) and ten (10) tons with a maximum width of six (6) feet.
6. Water shall be applied to dampen the surface of the compacted untreated base course surface prior to placement of chip seal paving material. No standing water shall be present on the roadway surface.
7. CRS-2 emulsified asphalt material shall diluted to two (2) part of concentrate to one (1) part of water by the manufacturer be applied at a minimum temperature of 145° F and at a rate to attain 50% chip embedment prior to rolling and 70% embedment following rolling. An application rate of 0.42 gal per square yard is expected. Adjust application rates as necessary. The materials technician shall verify proper application of the asphalt material.
8. Place Type I crushed stone aggregate immediately applied to the asphalt coated roadway surface at the rate of 25 pounds per square yard. The materials technician shall verify proper gradation and application of the gravel material.
9. Roll to seat the gravel material into the asphalt coated roadway surface. The materials technician shall verify proper rolling and seating of the gravel material.
10. The rolled roadway surface shall be lightly swept to remove excess gravel material. Care shall be taken not to dislodge seated material. Any areas stripped of gravel material shall be repaired with cold mix asphalt material.
11. Water shall be applied to dampen the surface of the rolled roadway surface prior to placement of additional chip seal paving material.
12. As above, CRS-2 emulsified asphalt material shall be applied at the approximate rate of 0.35 gal per square yard of the roadway surface. The materials technician shall verify proper application of the asphalt material.

13. Type II crushed stone aggregate shall be immediately applied to the asphalt coated roadway surface at the rate of twenty five (25) pounds per square yard. The materials technician shall verify proper gradation and application of the gravel material.
14. Roll to seat the gravel material into the asphalt coated roadway surface. The materials technician shall verify proper rolling and seating of the gravel material.
15. The rolled roadway surface shall be lightly swept to remove excess gravel material. Care shall be taken not to dislodge seated material.

Table A-9
Gradation Limits

Sieve Size	Percent Passing	
	Type I	Type II
1 in	100	100
1/2 in	0-10	100
3/8 in	0-10	70-90
No 4	0-10	0-10
No 8	0-5	0-5
No 200	0-1	0-1

A3.0 Drainage Calculations

A. Drainage calculations by a licensed professional shall be provided to show that all storm water facilities can adequately handle run-off from the site development as well as all upstream contributing flows. Hydraulic capacity of pipe and culvert systems must be verified with engineering calculations in accordance with the Utah Department of Transportation (UDOT) Roadway Drainage Manual of Instruction.

B. Calculations shall include a copy of the of the site grading and drainage plan, at the plan scale with the boundaries, acreages and C-factors of the interior drainage areas shown.

C. Calculations shall also include a map at an appropriate scale delineating the boundaries, flow paths, acreages and C-factors of the drainage areas upstream of the development, which contribute storm water to the development.

D. Construction drawings shall show the location, size, flow line elevations, profiles and details of drainage facilities and structures, including, but not limited to swales, ditches, culverts under public roads and private drives, drop inlets, storm sewers, and detention/retention ponds. Typical cross sections of all swales and ditches shall be shown.

E. Profiles of roads shall show profiles of storm sewers and cross sections of culverts together with points of intersection. Profiles shall show clearance of such drainage facilities with water mains and sanitary sewers.

A4.0 Hydrologic Procedures

A. For purposes of computing run-off, all existing and proposed gravel surfaced roadways, driveways, and parking areas shall be treated as being asphalt paved.

B. The Rational Method may be used to determine peak flows for sites smaller than 300 acres and having a time of concentration less than 30' minimum if the site surface characteristics make it applicable.

C. When the rational method is used, times of concentration for pre-development and post development shall be shown with their corresponding rain intensity.

D. Values from Table A-10 of rainfall intensity-duration-frequency shall be used with the rational method.

E. When the site surface characteristics warrant the use of a method other than the Rational Method, use the SCS method, Modified Rational Method or an approved procedure in accordance with Chapter 7 Hydrology of the UDOT Roadway Drainage Manual of Instruction.

F. Table A-11 shows precipitation frequency values that shall be used in conjunction with an approved hydrological procedure.

G. An inflow and outflow hydrograph will be required on all retention/detention basins.

H. Table A-12 shows the SCS 24-hr (Type II) rainfall distribution and the Farmer Fletcher rainfall distribution that shall be used to generate runoff hydrographs for detention/retention basins.

Table A-10 Rainfall-Intensity-Duration-Frequency
Precipitation Intensity Estimates (in/hr)
From NOAA Atlas 14
Logan Utah State University, Utah (42-5186) 41.7456 N 111.8033 W 4786 feet

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr
2	1.62	1.24	1.02	0.69	0.43	0.28	0.22	0.15	0.10	0.06	0.04
5	2.26	1.72	1.42	0.96	0.59	0.37	0.28	0.19	0.12	0.08	0.05
10	2.78	2.12	1.76	1.18	0.73	0.45	0.33	0.22	0.14	0.09	0.05
25	3.64	2.77	2.29	1.54	0.95	0.57	0.42	0.27	0.17	0.11	0.06
50	4.37	3.32	2.75	1.85	1.15	0.68	0.49	0.31	0.19	0.12	0.07
100	5.23	3.98	3.29	2.22	1.37	0.80	0.57	0.36	0.22	0.13	0.08
200	6.18	4.70	3.89	2.62	1.62	0.94	0.66	0.40	0.24	0.15	0.09
500	7.74	5.89	4.86	3.28	2.03	1.15	0.79	0.47	0.28	0.17	0.10
1000	9.07	6.90	5.70	3.84	2.38	1.34	0.91	0.53	0.31	0.18	0.11

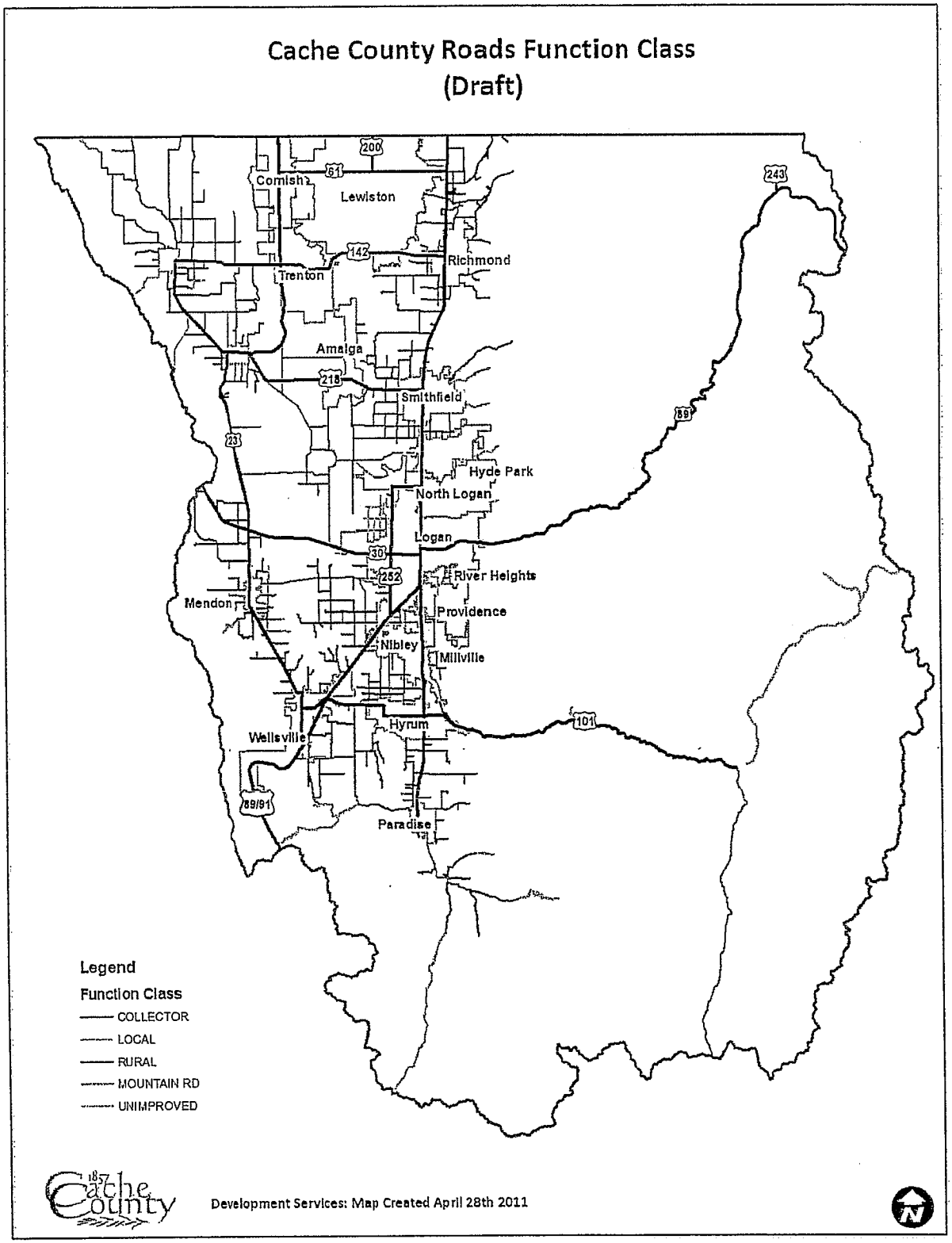
Table A-11 Precipitation Frequency Estimates (inches) 1. from NOAA Atlas 14 2. Logan Utah State University, Utah (425186) 41.7456 N 111.8033 W 4786 feet											
ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr
2	0.14	0.21	0.26	0.34	0.43	0.56	0.66	0.90	1.21	1.55	1.86
5	0.19	0.29	0.35	0.48	0.59	0.74	0.84	1.13	1.48	1.90	2.26
10	0.23	0.35	0.44	0.59	0.73	0.90	1.00	1.33	1.73	2.18	2.59
25	0.30	0.46	0.57	0.77	0.95	1.14	1.25	1.62	2.07	2.58	3.05
50	0.36	0.55	0.69	0.93	1.15	1.36	1.47	1.86	2.34	2.89	3.42
100	0.44	0.66	0.82	1.11	1.37	1.60	1.71	2.13	2.64	3.23	3.81
200	0.52	0.78	0.97	1.31	1.62	1.88	1.98	2.41	2.95	3.58	4.22
500	0.65	0.98	1.22	1.64	2.03	2.31	2.38	2.83	3.39	4.05	4.78
1000	0.76	1.15	1.43	1.92	2.38	2.69	2.73	3.19	3.74	4.42	5.22

Table A-12 SCS 24-hr and Farmer Fletcher Rainfall Distribution

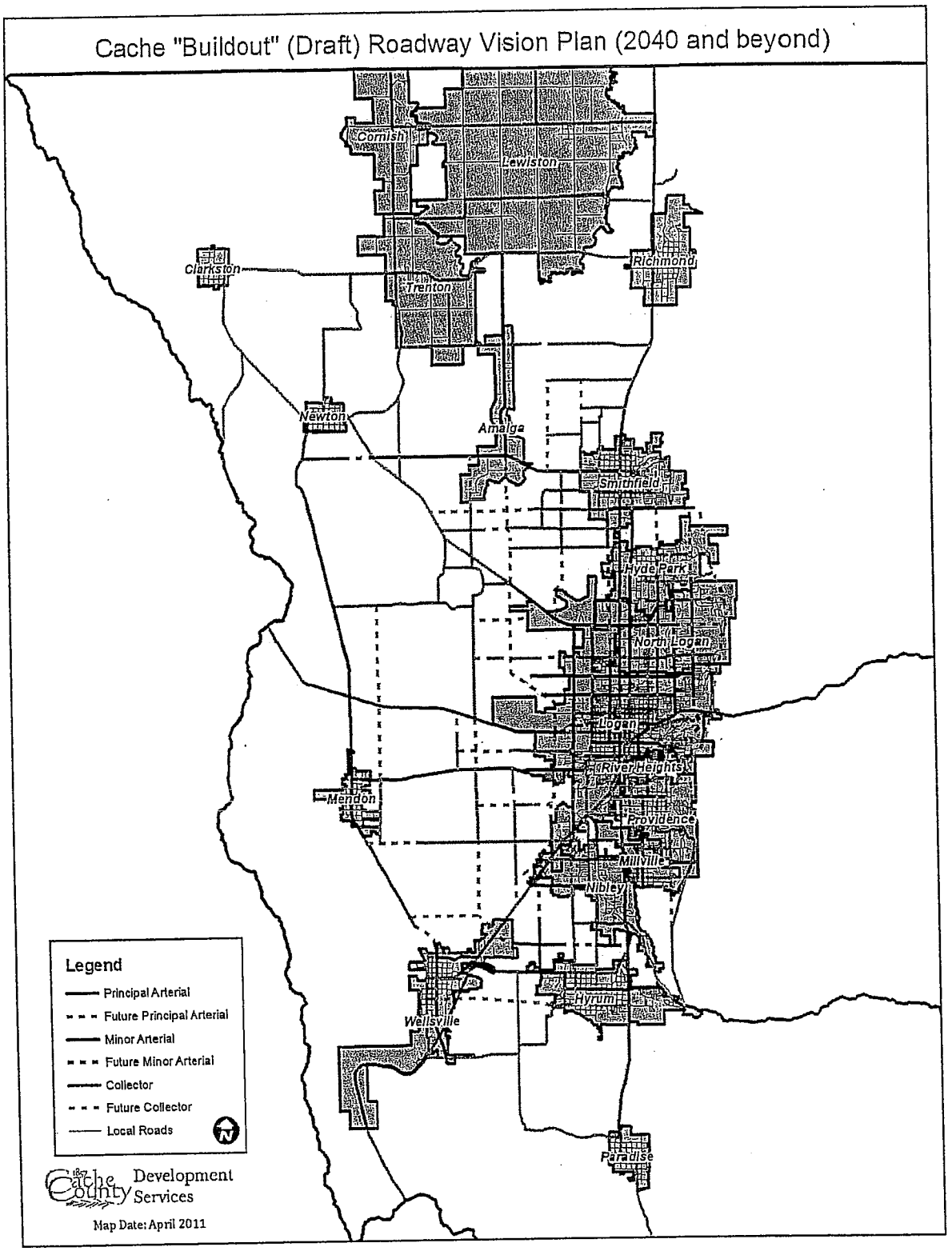
Farmer Fletcher 1-hr Storm Distribution					
Time (hrs)	Cumulative Depth (%)	Time (hrs)	Cumulative Depth (%)	Time (Min)	Cumulative Depth (%)
1	1.08	13	77.24	6	36.5
1.5	1.64	13.5	79.89	9	51
2	2.23	14	81.97	12	61.5
2.5	2.84	14.5	83.8	15	70
3	3.47	15	85.38	18	76.5
3.5	4.14	15.5	86.76	21	80.6
4	4.83	16	88.01	24	83.9
4.5	5.55	16.5	89.14	27	86.2
5	6.32	17	90.19	30	88
5.5	7.12	17.5	91.15	33	89.5
6	7.97	18	92.06	36	90.8
6.5	8.87	18.5	92.91	39	92
7	9.84	19	93.71	42	93.2
7.5	10.89	19.5	94.46	45	94.4
8	12.03	20	95.19	48	95.6
8.5	13.28	20.5	95.88	51	96.8
9	14.67	21	96.53	54	98
9.5	16.25	21.5	97.17	57	99
10	18.08	22	97.77	60	100
10.5	20.42	22.5	98.36		
11	23.51	23	98.92		

11.5	28.33	23.5	99.47		
		24	100		

A5.0 Current Road Conditions Classification



A6.0 Planned Roadway Classification



CACHE COUNTY
Ordinance No. 2011-13

AN ORDINANCE OF THE CACHE COUNTY COUNCIL CREATING A COMMUNITY DEVELOPMENT AND RENEWAL AGENCY, DESIGNATING THE COUNTY COUNCIL TO BE THE GOVERNING BODY OF THE COMMUNITY DEVELOPMENT AND RENEWAL AGENCY, GRANTING TO THE COMMUNITY DEVELOPMENT AND RENEWAL AGENCY AUTHORITY AS PROVIDED BY STATUTE, AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the Cache County Council ("Council") met in regular meeting on September 13, 2011, to consider, among other things, creating a community development and renewal agency, designating the Council to be the governing body of the community development and renewal agency, granting to the renewal agency authority as provided by statute, and providing for an effective date; and

WHEREAS, the Council has determined that it is in the best interest of Cache County to create a community development and renewal agency and otherwise take such actions to encourage, promote, and/or provide for development, among other things; and

WHEREAS, after careful consideration, the Council has determined that it is in the best interest of the health, safety, and welfare of the citizens of Cache County to create a community development and renewal agency, to designate the Council to be the governing body of the community development and renewal agency, to grant to the community development and renewal agency authority as provided by statute, and to provide for an effective date; and

NOW, THEREFORE, be it ordained by the Council as follows:

1. There is hereby created a community development and renewal agency, to be known as the Community Development and Renewal Agency of Cache County ("Agency").

2. The Council is hereby designated as the governing body of the Agency.

3. The Agency is hereby authorized to enter into agreements and transact business and to exercise all powers, rights, duties, and privileges as set forth in the Limited Purpose Local Government Entities—Community Development and Renewal Agency (UTAH CODE ANN. § 17C-1-101, *et seq.*) ("Act"), as may be amended from time to time. All of the provisions of the Act, as the same may be amended from time to time, are hereby adopted as if fully set forth herein.

4. The Clerk is directed to provide notice to the Lieutenant Governor as required by UTAH CODE ANN. § 17C-1-201(2).

5. This Ordinance shall become effective immediately upon posting, as required by law.

PASSED AND APPROVED this 13th day of September, 2011.

	In Favor	Against	Abstained	Absent
Potter	X			
Buttars	X			
White	X			
Petersen	X			
Robison	X			
Yeates	X			
Zilles	X			
Total	7	0	0	0

CACHE COUNTY

By: Jon White
Jon White, Chairman

ATTEST:

Jill N. Zollinger
Jill N. Zollinger, County Clerk

Publication Date: September 27, 2011

CACHE COUNTY CORPORATION
2012 BUDGET PREPARATION SCHEDULE

September 7, 2011(Wed)	Department Correlation Meeting/Budget Schedule presented
September 15, 2011(Thur)	Expenditure Estimate forms distributed Revenue Estimate forms distributed
September 27, 2011(Tue)	County Council Establishes Priorities
ASAP before September 30, 2011(Fri)	Expenditure Request Forms completed and returned Revenue Estimate Forms completed and returned
October 14, 2011(Fri)	Auditor & Finance Director provides draft budget request numbers to Executive
October 25, 2011(Tue)	Executive presents tentative budget to the County Council
October 24, 2011(Mon) - November 1, 2011 (Tue)	Executive, Finance Director and Auditor hold budget meetings with Elected Officials and Department Heads
November 8, 2011(Tue)	Executive presents proposed budget to the County Council
November 8, 2011(Tue) - November 22, 2011(Tue)	County Council workshops on 2012 Proposed Budget
November 8, 2011(Tue)	Determine need for tax increase and 1/4 page ad
November 22, 2011(Tue)	**Public hearing on 2012 Budget**
December 6, 2011(Tue)	Council approves budget
December 13, 2011(Tue)	County Executive approves budget or issues line-item veto
Before or by December 30, 2011(Fri)	2012 Budget line item veto override consideration and/or action
December 30, 2011(Fri)	Statutory deadline for adoption of Budget