

**ORDINANCE NO. 24-12**

**AN ORDINANCE AMENDING WASATCH COUNTY CODE CHAPTER 14.02 & 16.27 TO  
UPDATE ENGINEERING ROAD STANDARDS.**

**RECITALS**

**WHEREAS**, Wasatch County desires to correct and clarify standards for trails, sidewalks, and roads to beautify the County and provide for the safety and welfare of its residents; and

**WHEREAS**, Utah Code Section 17-50-302 authorizes the County to provide services, exercise powers, and perform functions that are reasonably related to the safety, health, morals, and welfare of their inhabitants; and

**WHEREAS**, Utah Code Section 17-50-309 authorizes the County to enact regulations for the control, construction, alteration, repair, and use of all public roads and highways outside of cities or towns; and

**WHEREAS**, Utah Code 17-27a-502 requires Wasatch County to give notice of public hearing as provided in Utah Code 17-27a-205(1)(a), and to hold a public hearing; and

**WHEREAS**, Wasatch County gave notice of all public meetings and public hearings related to this ordinance as required, and the planning commission held a public hearing as required; and

**WHEREAS**, the County Legislative Body, having considered all of the evidence provided to be in the best interest of the health, general welfare, and safety of the inhabitants of Wasatch County;

**NOW THEREFORE**, the County Legislative Body of Wasatch County ordains that the Wasatch County Code be amended as follows:

**SECTION I: Enactment.** The following amendments, additions, and deletions to Title 14 & Title 16 are hereby enacted: *See attached Exhibit A.*

**SECTION II: Repealer.** If any provisions of the County Code heretofore adopted are wholly inconsistent with this ordinance, they are hereby repealed.

**SECTION III: Amendment of Conflicting Ordinances.** To the extent that any ordinances, resolutions, or policies of Wasatch County partially conflict with this ordinance, they are hereby amended to comply with the provisions hereof.

**SECTION IV: Effective Date.** This Ordinance shall become effective immediately upon execution by the Chair of the County Council and the completion of public notice requirements imposed by state statute.

**SECTION V: Severability.** If any section, subsection, sentence, clause, or phrase of this ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, said portion shall be severed and such declaration shall not affect the validity of the remainder of this ordinance.

SECTION VI: **Public Notice.** The Wasatch County Clerk, and ex officio Clerk of the Wasatch County Council, is hereby ordered, in accordance with the requirements of Section 17-53-208, Utah Code Annotated, 1953, as amended, to do as follows:

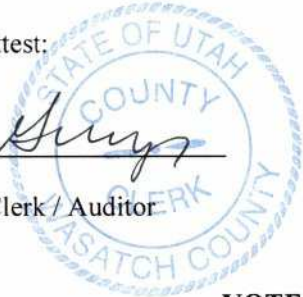
- a. Enter at length this ordinance in the ordinance book;
- b. Deposit a copy of this ordinance in the office of the County Clerk;
- c. Publish a short summary of this ordinance, together with a statement that a complete copy of the ordinance is available at the County Clerk's office and with the name of the members voting for and against the ordinance, for at least one publication in a newspaper published in and having general circulation in the county; or post a complete copy of this ordinance in nine (9) public places within the County.

**APPROVED** and **PASSED** this 18 day of September, 2024.

Attest:

WASATCH COUNTY COUNCIL:

  
 Joey Grainger  
 Wasatch County Clerk / Auditor



  
 Spencer Park, Chair  
 Wasatch County Council

	<b>VOTE</b>
Spencer Park, Chairman	<u>Y</u>
Karl McMillan, Vice-Chair	<u>Y</u>
Luke Searle	<u>Y</u>
Steve Farrell	<u>Y</u>
Erik Rowland	<u>Y</u>
Kendall Crittenden	<u>Y</u>
Mark Nelson	<u>Y</u>

**ADOPTION OF ORDINANCE AFFIDAVIT**

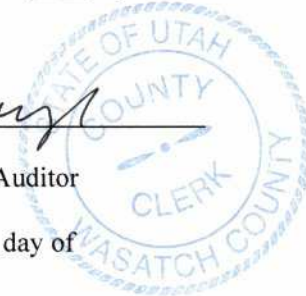
STATE OF UTAH                    )  
  ): ss.  
COUNTY OF WASATCH        )

I, the undersigned, the duly qualified and acting County Clerk of Wasatch County, Utah, and ex officio Clerk of the Wasatch County Council do hereby further certify, according to the records of said Council in my official possession, and upon my own knowledge and belief, that I have fulfilled the requirements of Section 17-53-208, Utah Code Annotated, 1953, as amended, by:

- [ ✓ ] (a) Causing this ordinance to be entered at length in the ordinance book;
- [ ✓ ] (b) Causing three (3) copies of this ordinance to be deposited in the office of the County Clerk;
- [ ✓ ] (c) Causing a short summary of this ordinance, together with a statement that a complete copy of the ordinance is available at the County Clerk's office and with the name of the members voting for and against the ordinance to be published for at least one publication in *The Wasatch Wave*, a newspaper of general circulation within the geographical jurisdiction of Wasatch County; or posting a complete copy of this ordinance in nine (9) public places within the County.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature and impressed hereon the official seal of the County Council of Wasatch County, Utah, this 18 day of September 2024.

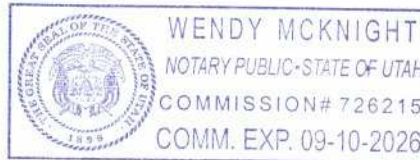
Joey P. Granger  
Joey Granger  
Wasatch County Clerk / Auditor



SUBSCRIBED AND SWORN to me, a Notary Public, this 18 day of September, 2024.

Wendy McKnight  
Notary Public

Residing in: Wasatch  
My commission expires: 09/10/2026



**EXHIBIT A – PROPOSED AMENDMENT**

**Chapter 14.02: ENGINEERING DEPARTMENT**

**14.02.01: CREATION OF DEPARTMENT AND DEFINITIONS**

There is hereby created a department of engineering. The department shall consist of one engineering coordinator or as contracted by the County Manager and such other employees or contract as may be necessary to fulfill the duties of the department.

A. Definitions:

Alley: means a public access privately maintained within a block primarily intended for service and access to abutting property by vehicles and not designed for general travel and only allowed when units have frontage on a road or pedestrian plaza built to the applicable County standard.

**14.02.04: EXCAVATION, FILL CONSTRUCTION, SWPPP, AND EROSION CONTROL**

A. Permits:

1. Driveway and Encroachment Permit:

h. Payment of applicable fees, see 4.09.02.

2. Grading Permit:

i. Payment of applicable fees, see 4.09.02.

3. Right of Way Excavation Permit:

k. Payment of applicable fees, see 4.09.02.

4. Subdivision Construction Permit:

k. Payment of applicable fees, see 4.09.02.

B. Subdivision Bonding:

1. Definitions:

PERFORMANCE BOND: An instrument, in a form approved by the county, with a sum not fixed as a penalty binding the developer to the county, to complete certain actions

35 according to the standards in this code and the Wasatch County standards handbook, and  
 36 any other applicable regulation or condition imposed by the county as a condition of  
 37 approval including any common amenities, improvements on development parcels or  
 38 common area improvements or amenities approved that allowed additional density;  
 39 conditioned, however, that the payment of the penalty may be avoided by the  
 40 performance by the developer of the acts agreed to in the bond documents.

41  
 42 WARRANTY BOND: An instrument, approved by the county, with a sum fixed  
 43 guaranteeing the quality and/or conformance of completed and accepted improvements or  
 44 other promised performance according to the standards in this code, the Wasatch County  
 45 standards handbook, and any other applicable regulation or condition imposed by the  
 46 county as a condition of approval.

47  
 48 4.2. Performance Bond: For Subdivision Construction Permits, a performance bond shall be  
 49 posted with Wasatch County prior to any final approved plat recorded in a principal  
 50 amount of one hundred percent (100%) of the total estimated cost of any improvement or  
 51 other performance required by or promised to Wasatch County as part of the  
 52 development, provided the improvements or other performance are not completed and  
 53 accepted by Wasatch County prior to any final approved plat being recorded. The bond  
 54 must include protection for the county legislative body, must meet county standards ~~or~~  
 55 and county code. The bond shall consist of cash, and the bond agreement shall be on a  
 56 form approved by the County Attorney. The Bond Agreement shall require the  
 57 infrastructure improvements necessary for building codes and fire codes to be met and  
 58 continue to be met using ~~good-standard~~ management practices and frequency in the  
 59 Wasatch Back, to be completed before building permits can be issued. The County  
 60 Manager, in his sole discretion, may accept a letter of credit from an FDIC insured  
 61 financial institution, or an escrow as approved by the County. Any letter of credit must  
 62 expire not less than 1 year after the reasonably anticipated completion date of the  
 63 improvements, as determined in the discretion of the county engineer. If the performance  
 64 bond remains in effect for more than a year, the developer shall annually provide an  
 65 updated cost estimate, and shall bond for any additional costs. In no event shall the  
 66 County be responsible to complete bonded for improvements, in part, because the Utah  
 67 Code has limited the ability of the County to adequately ensure the completion assurance  
 68 will be adequate to complete the bonded for improvements, though the County may, in its  
 69 sole discretion, complete bonded for improvements. The bond, including any escrow or  
 70 letter of credit, must be subject to the laws of the State of Utah and Wasatch County, and  
 71 must provide the forum of Wasatch County. The bond may name the developer or the  
 72 contractor as the "principal". Each bond shall be accompanied by a bond agreement  
 73 between the developer, county and financial institution (if applicable and necessary).  
 74 The estimated cost shall be based upon the estimate of the engineering coordinator, who shall  
 75 take into account some or all of the following factors when making his estimate:

- 76 a. The developer's engineering estimate;  
 77 b. The estimate of any reviewing engineer or other qualified reviewer;  
 78 c. The average cost paid for the same type of performance in Wasatch County in the  
 79 past; and  
 80 d. Any other relevant information.

81 3. Failure Of Performance, Extension Of Time: In the event that any performance required  
 82 by a performance bond is not completed within the time period allowed for under the  
 83 performance bond, the developer may petition the county for an extension of time in  
 84 which to complete the required performance. A one-year extension of time may be

85 granted by the county upon application by the developer and upon a showing of good  
 86 cause and diligent effort by the developer to complete the required improvements within  
 87 the required period, provided such application is submitted at least sixty (60) days prior  
 88 to the expiration of the performance bond, and the issuer of the bond is willing to extend  
 89 the time of the assurance. The bond amount shall be increased ten percent (10%) for each  
 90 year extension granted by the county. If at the end of the performance bond term, the  
 91 county determines that the required improvements or other promised performance has not  
 92 been completed according to Wasatch County standards and other requirements placed  
 93 upon the developer, the county, in its sole discretion may:

- 94 a. Refuse to accept the improvements or other performance and require the developer  
 95 to bring the improvements or other performance to county standards; and  
 96 b. Receive any part of the bond which is necessary to complete the promised  
 97 performance or to repair any inadequate performance and proceed with work to  
 98 bring the performance to county standards.

99 3.4. Partial Releases of Bonds (Bond Reduction): The county may approve partial bond  
 100 releases (bond reductions) of the performance bond prior to final release. Each release  
 101 must be approved by all of the following: county planning director (for landscaping or  
 102 planning bonds), county engineering coordinator/director, (for infrastructure bonds),  
 103 county manager, and county attorney. When the number of releases exceeds two (2), a  
 104 two hundred dollar (\$200.00) fee A Bond Reduction Fee, pursuant to section 4.09.02,  
 105 will be assessed for each release thereafter to cover administrative costs. The releases  
 106 approved by the county shall not exceed the contractor's bond and shall not exceed the  
 107 percentage of work completed and, at no time prior to final acceptance or approval of the  
 108 improvements by the county, may the total amount of the bond be allowed to be reduced  
 109 lower than the greater of: a) one hundred ten percent (110%) of the value of the county  
 110 manager or engineering coordinator's estimate of the incomplete infrastructure  
 111 improvements or other promised performance-; or b) the amount required by the  
 112 warranty bond in the event the performance bond and warranty bond are on the same  
 113 document. Until complete, the County may shall maintain a balance of a minimum of  
 114 25% of the total bond amount.

- 115 5. Warranty Bond; A warranty bond in the amount of ten percent (10%) of either the county  
 116 engineer's approved estimate of completion of all public infrastructure, or the actual cost  
 117 of completing the public infrastructure, is required for the County to accept or approve any  
 118 infrastructure improvement, or prior to allowing a final plat to be recorded that includes  
 119 any public infrastructure. The warranty bond must shall be cash. The bond shall be valid  
 120 for a period of one year from the time of final acceptance of construction to guarantee  
 121 compliance with the requirements of this chapter, but may be for up to two years if the  
 122 County Manager or engineering coordinator finds good cause. The bond shall be released  
 123 upon approval of the engineering coordinator and the County Manager. The warranty bond  
 124 shall be on a form approved by the County Attorney. In some cases, the warranty bond  
 125 will be on the same document as the performance bond. The warranty bond must provide  
 126 that in the event the completed and accepted improvements or other promised performance  
 127 covered by the bond fail, are not structurally sound, or are found to be less than the accepted  
 128 standard during the term of the bond, that the county has the right to require repair and/or  
 129 replacement, and in the event of failure by the developer to adequately respond, the county  
 130 shall have the right to recover against the warranty bond and repair or replace the covered  
 131 improvements or other promised performance. In the event the performance and warranty  
 132 bond are on the same document, the performance bond may not be released for an amount  
 133 lower than the amount required for the warranty bond.

- 134 6. Weed Bond: A cash weed bond is required on all Subdivision Construction Permits. The  
 135 bond is refundable after a 3 year period after a project has received final approval or until  
 136 the Wasatch County noxious weed manager approves the bond release. The weed bond  
 137 agreement, and release forms can be found on the Wasatch County's web site in the  
 138 Engineering department under forms. A non refundable weed fee is charged on the other  
 139 Title 14 permit types.
- 140 7. Approval Of Bonds: Any bond submitted to the county pursuant to this section must be on  
 141 a form approved by the county, which form will be available from the county attorney's  
 142 office, submitted to the county department requesting the bond and approved by the county  
 143 as meeting the requirements of this code. Property bonds will not be acceptable in any  
 144 form.
- 145 8. Required Time Period For Performance: All improvements must be completed by the date  
 146 set in the bond according to county approved plans and specifications unless the county  
 147 manager or engineering coordinator agrees in writing to extend the duration. Any escrow,  
 148 or letter of credit shall be extended to match the revised anticipated completion date, and  
 149 in no event shall expire prior to the bonded for improvements being completed and  
 150 approved by the county. It is the express obligation of the developer and/or contractor to  
 151 either complete the improvements before the performance bond expires, or, in the case of  
 152 a warranty bond, to repair and/or replace the substandard improvements before the  
 153 warranty bond expires, or to provide the county with a new bond and bond agreement  
 154 approved by the county to guarantee and/or warrant the improvements. The new bond and  
 155 bond agreement must be provided to the county one year in advance of the expiration of  
 156 the performance bond, or one month before the expiration of the warranty bond. It shall  
 157 not be a defense to the validity of the bond or bond agreement that the time to perform as  
 158 listed in the bond or bond agreement has expired. The obligations in the bond and bond  
 159 agreement shall continue until such time as the applicable statute of limitation expires  
 160 under Utah law.
- 161 9. Improvements Covered By Bonds: Bonds may be requested for any improvements required  
 162 by Wasatch County standards, this code, the development review committee, planning  
 163 staff, the county engineer, the weed control board, the planning commission and the county  
 164 council. These improvements may include on-site and off-site improvements, including,  
 165 but not limited to, roads, curb and gutter, storm drains, sewer, water, street lighting, signs,  
 166 sidewalks, landscaping, open space, fencing, amenities, weed control, parks and trails.
- 167 10. No Third Party Rights: All performance and warranty bonds and agreements are between  
 168 the county, developer (or contractor if applicable) and financial institution. No other party  
 169 shall be deemed a third party beneficiary or have any rights under this section or any bond  
 170 or agreement entered into pertaining to performance and warranty bonds. Any other person  
 171 or entity, including, but not limited to, owners of individual units or lots, shall have no right  
 172 to bring any action under and performance or warranty bond or agreement as a third party  
 173 beneficiary or otherwise.

174 ...

175 **14.02.06: ROAD GRADE EXCEPTIONS**

- 176 A. Road grades are generally listed in Section 14.02.07(M). The minimum allowed grade for all  
 177 roadways is one-half percent (0.5%).
- 178 B. The maximum allowed grades for all roadways are as follows:
- 179 1. Minor local, the maximum grade shall not exceed ten percent (10%);

- 180 ~~2. Local, the maximum grade shall not exceed ten percent (10%);~~  
 181 ~~3. Major local, the maximum grade shall not exceed ten percent (10%); and~~  
 182 ~~4. Minor collector, the maximum grade shall not exceed eight percent (8%).~~

183 ~~C.B.~~ Physical terrain may require exceptions to the above maximum grade. The following  
 184 mitigating circumstances may permit an increase in the maximum grade. The burden of meeting  
 185 the criteria shall be solely upon the applicant and shall be shown by a clear and convincing  
 186 standard:

- 187 1. Terrain difficulties;
- 188 2. Nature of materials; soil and geology;
- 189 3. Significant vegetation to be preserved;
- 190 4. Aspect, i.e., north facing, south facing, etc.;
- 191 5. Size of lots;
- 192 6. Number of units serviced;
- 193 7. Drainage considerations;
- 194 8. Roadway classification;
- 195 9. Pullouts provided, widths and spacing;
- 196 10. Safety mitigation factors are added; and
- 197 11. Length of exception requested.

198 ~~D.C.~~ An application for an exception to Section 14.02.06 shall follow the process and meet the  
 199 requirements of Section 14.02.07(N), except that the findings required under Section  
 200 14.02.07(N)(1)(e) shall be replaced with the findings required under Section 14.02.06(~~CB~~). In the  
 201 event the applicant has met its burden of showing an exception, the maximum allowed centerline  
 202 grades are as follows:

- 203 1. ~~Local~~ grade shall not exceed twelve percent (12%) for the following roads;;
  - 204 a. Major Local with swale
  - 205 b. Agricultural Seasonal Road
  - 206 c. Fire Emergency
  - 207 d. Mountain Road
  - 208 a-e. Shared Driveway
- 209 ~~2. Major local grade shall not exceed ten percent (10%); and~~
- 210 ~~3.2. Minor collector grade shall not exceed eight percent (8%). Exceptions requested for~~  
 211 maximum centerline grade shall not be granted for the following roads:
  - 212 a. Arterial
  - 213 b. Major Collector
  - 214 c. Minor Collector
  - 215 d. Major Local
  - 216 a-e. Other roads not otherwise listed.

217 ~~E.D.~~ Compliance with local road grade standards does not guarantee school bus service.

218 ...

219 **14.02.07: GENERAL ROAD DESIGN STANDARDS**

220 Roads shall be designed at a minimum in accordance with AASHTO design criteria and per street cross  
 221 sections shown in section 14.02.08 of this chapter. The roadway design standards shall be the same for  
 222 publicly owned and all privately owned roadways. All Wasatch County roads shall be classified by the  
 223 county master transportation plan. The standards shall be applicable to new developments in Wasatch  
 224 County:

225 A. **One Hundred and Six Foot (106') width Arterial (See section 14.02.08, Figure 1):** To be used  
 226 where the potential of traffic at build out is greater than 8000 ADT requiring a minimum of 3  
 227 driving lanes (including the turn lane) and 5' asphalt shoulders for bike/emergency lane. Drainage  
 228 to be controlled with a drainage swale, no curb and gutter. ~~In areas where the profile grade is~~  
 229 ~~steeper than 5% the drainage swale must be lined with an approved fabric or rip rap.~~ There will  
 230 be no private resident access allowed ~~of frontage.~~ There will be no on street parking allowed.  
 231 ~~Larger right of ways allows for two meandering ten foot (10') asphalt paths on each side of the~~  
 232 ~~road.~~

234 ~~1. The County Council will approve the final section for construction. The following is a~~  
 235 ~~suggested section as shown in section 14.02.08, figure 1 of this chapter:~~

236 ~~a. A five foot (5') concrete meandering sidewalk or an eight ten foot (8'10') paved~~  
 237 ~~asphalt trail based on the county overall trail plan, located between off set one~~  
 238 ~~foot (1') from the property line and the drainage swale;~~

239 ~~— A twelve foot (12') landscape park strip;~~

240 ~~b. A five foot (5') drainage swale;~~

241 ~~c. A two foot (2') gravel shoulder;~~

242 ~~d. A five foot (5') paved shoulder;~~

243 ~~e. A twelve foot (12') paved surface lane;~~

244 ~~f. A twelve foot (12') paved median;~~

245 ~~g. A twelve foot (12') paved surface lane;~~

246 ~~h. A five foot (5') paved shoulder;~~

247 ~~i. A two foot (2') gravel shoulder;~~

248 ~~— A five foot (5') swale;~~

249 ~~j. A twelve foot (12') landscape park strip;~~

250 ~~k. A five ten foot (5'10') meandering asphalt sidewalk through a twenty three foot~~  
 251 ~~(23') section between trail off set one foot (1') from the property line and the~~  
 252 ~~drainage swale.~~

253 B. **Seventy Five Foot (75') Major Collector (See section 14.02.08, Figure 2):** To be used where  
 254 the potential of traffic at build out is greater than 8000 ADT requiring a minimum of 3 driving  
 255 lanes (including turn lane) and 5' asphalt shoulders for bike/emergency lane. Drainage to be  
 256 controlled with a drainage swale, no curb and gutter. ~~In areas where the profile grade is steeper~~  
 257 ~~than 5% the drainage swale must be lined with an approved fabric or rip rap.~~ There will be no  
 258 private residential access allowed except for very specific exceptions for existing buildable lots  
 259 bordering a 75' county right of way in circumstances where the applicant has proven safety

260 concerns can be adequately mitigated. These exceptions can only be approved by the County  
 261 Manager and Engineering Coordinator. There will be no on street parking allowed. ~~The right of~~  
 262 ~~way allows for two meandering five foot (5') walkways on each side of the road.~~

263 1. ~~The County Council will approve the final section for construction. The following is a~~  
 264 ~~suggested section as shown in section 14.02.08, figure 2 of this chapter:~~

265 a. ~~An five foot (5') concrete meandering sidewalk or an eight foot (8') paved asphalt~~  
 266 ~~trail based on the county overall trail plan, located between off set one foot (1')~~  
 267 ~~from the property line and the drainage swale;~~

268 b. ~~A five foot (5') drainage swale;~~

269 c. ~~An two footeighteen inch (2'18") gravel shoulder;~~

270 d. ~~A five foot (5') paved shoulder;~~

271 e. ~~An eleven foot (11') paved surface lane;~~

272 f. ~~A twelve foot (12') paved median;~~

273 g. ~~An eleven foot (11') paved surface lane;~~

274 h. ~~A five foot (5') paved shoulder;~~

275 i. ~~An two footeighteen inch (2'18") gravel shoulder;~~

276 j. ~~A five foot (5') swale;~~

277 k. ~~An five eight foot (5'8') meandering sidewalk through a section between asphalt~~  
 278 ~~trail off set one foot (1') from the property line and drainage swale.~~

279 C. **Sixty Six foot (66') Minor Collector Roadway (See section 14.02.08, Figure 3):** To be used  
 280 where the potential of traffic at build out is between 2000 and 8000 ADT. Roadway to have two  
 281 driving lanes with 5' asphalt shoulders for bike/emergency lanes. Drainage to be controlled with a  
 282 drainage swale, no curb and gutter. ~~In areas where the profile grade is steeper than 5% the~~  
 283 ~~drainage swale must be lined with an approved fabric or rip rap.~~ There will be no private resident  
 284 access allowed except for very specific exceptions for existing properties bordering a 66' county  
 285 right of way. Exceptions to be approved by the County Manager or Engineering Coordinator.  
 286 There will be no on street parking. ~~Right of way allows for two meandering five foot (5')~~  
 287 ~~walkways on each side of the road.~~

288 1. ~~With a swale, the sections shall be built as shown in section 14.02.08, figure 3 of this~~  
 289 ~~chapter, and shall meet the following criteria:~~

290 a. ~~An five eight foot (5'8') meandering sidewalk within a asphalt trail off set nine~~  
 291 ~~one foot (9'1') area between from the property line and drainage swale;~~

292 b. ~~A five foot (5') drainage swale;~~

293 c. ~~A two foot (2') gravel shoulder;~~

294 d. ~~A five foot (5') paved shoulder;~~

295 e. ~~Two (2) 12 foot paved surface lanes;~~

296 f. ~~A five foot (5') paved shoulder;~~

297 g. ~~A two foot (2') gravel shoulder;~~

298 h. ~~A five foot (5') drainage swale;~~

~~i. An five eight foot (5'8") meandering sidewalk within a off set nine one foot (9'1") area between from the property line and drainage swale.~~

- D. **Sixty Foot (60') Major Local Road** (See section 14.02.08, Figure 4): This is the primary residential road standard where the average lot frontage is less than one hundred fifty feet (150'). The traffic potential at build out will be less than 2000 ADT. The overall road width to be 30' of asphalt. On street parking may be allowed. Due to the potential for numerous driveways, the drainage is to be controlled with curb and gutter. ~~This Major Local Road includes 4' sidewalk on each side of the street.~~

~~1. Sixty Foot (60') With a curb and gutter, the section shall be built, as shown in section 14.02.08, figure 4 of this chapter, and shall meet the following criteria:~~

- ~~a. A four five foot (4'5") sidewalk off set one foot (1') from the property line;~~  
~~b. A five six and one half foot (56.5') landscape park strip;~~  
~~c. A two and one half foot (2.5') modified or rolled curb and gutter;~~  
~~d. Two (2) 15 foot paved surface lanes;~~  
~~e. A two and one half foot (2.5') modified or rolled curb and gutter;~~  
~~f. A five six and one half foot (56.5') landscape park strip;~~  
~~g. A four five foot (4'5") sidewalk off set one foot (1') from the property line.~~

- E. **Major Local with Swales** (See section 14.02.08, Figure 5): To be used for local roadways, with RA-1 or ~~greater-less-dense~~ zoning, with a minimum 150' lot frontage. The traffic potential at build out will be less than 2000 ADT. Drainage to be controlled with a drainage swale, no curb and gutter. ~~In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric. Rip Rap will not be allowed. Trail needs to be on one side of the street, location to be determined or approved by Wasatch County Planning and Engineering departments.~~

~~1. The section shall be built, as shown in section 14.02.08, figure 5 of this chapter, and shall incorporate the following criteria:~~

- ~~a. An fourteen foot (14') area on one side of the right of way for an eight foot (8') wide meandering paved asphalt trail off set one foot (1') from the property line. The trail needs to only be on one side of the street. With the Location location to be determined or approved by Wasatch County Planning and Engineering departments. Center line of paved surface of the motor vehicle road to be off set six feet (6') from center line of the right of way to allow more room for trail to meander and a five foot (5') park strip. Only for this Major Local with Swales standard, the width and material that the trail is built from supersede the width and material standards for trails in Title 16 of the Wasatch Code.~~
- ~~— A ten foot (10') drainage swale;~~
- ~~b. A two foot (2') gravel shoulder;~~
- ~~c. Two (2), fifteen foot (15') paved surface lanes for motor vehicles.~~
- ~~d. A two foot (2') gravel shoulder.~~
- ~~e. A five foot (5') drainage swale on each side of the asphalt. Drainage swales to be topsoil and seeded, no cobble lined ditch. Permanent erosion control fabric to be installed if road grade is greater than 5%.~~

341 ~~f.— A two foot (2') open landscape space between edge of swale and right of way.~~

342 F. **Agriculture/Seasonal Road (See section 14.02.08, Figure 6):** To be used for private local  
 343 roadways to support agricultural uses, with RA-5 or less dense zoning, with a minimum 300' lot  
 344 frontage. If used to serve a subdivision, an Agricultural/Seasonal road shall only be used to serve  
 345 less than five buildable lots. The traffic potential at build out will be less than 50 ADT. Drainage  
 346 to be controlled with a drainage swale, no curb and gutter. ~~In areas where the profile grade is~~  
 347 ~~steeper than 5% the drainage swale must be lined with an approved fabric or rip rap.~~ Any other  
 348 road surface besides asphalt must be approved by the engineering coordinator and the county  
 349 council, and may only be approved in these limited circumstances where the applicant has proven  
 350 and the County Council finds health, safety, and welfare of the road and the public will not be  
 351 negatively impacted.

352 ~~1.— Twenty four foot (24') wide road with either road base, roto-mill tailings, or asphalt~~  
 353 ~~surface course as shown on section 14.02.08, figure 6 of this chapter, and shall~~  
 354 ~~incorporate the following criteria:~~

355 ~~a.— Road Base Surface: Twenty four foot (24') width of a minimum nine inches (9")~~  
 356 ~~commercial road base. An additional section width may be required depending~~  
 357 ~~on subgrade soils.~~

358 ~~b.— Roto-Mill Tailings Surface: Twenty four foot (24') width of a minimum section~~  
 359 ~~comprised of four inches (4") of roto-mill tailings and six inches (6") of~~  
 360 ~~commercial road base. An additional section width may be required depending~~  
 361 ~~on subgrade soils.~~

362 ~~c.— Asphalt Surface: Twenty four foot (24') wide asphalt surface course with two (2)~~  
 363 ~~2-foot gravel shoulders. A minimum section width of three inches (3") of asphalt~~  
 364 ~~and eight inches (8") of road base is required. An additional section width may be~~  
 365 ~~required depending on subgrade soils.~~

366 ~~d.— Road Grade: A five foot (5') wide ditch to be on the cut side of the road. If road~~  
 367 ~~grade is steeper than five percent (5%), the ditch is to be lined with a C-350~~  
 368 ~~fabric or better, or six inches (6") of riprap. If the road grade is steeper than five~~  
 369 ~~percent (5%), check dams spaced no more than every two hundred feet (200')~~  
 370 ~~will be required.~~

371 G.— **Fire/Emergency Road (See section 14.02.08, Figure 7):** Only to be used in legally non-  
 372 conforming subdivisions or lots of record and must be expressly approved by the engineering  
 373 coordinator and the county council on a ~~ease-by-ease~~case-by-case basis where the applicant has  
 374 proven and the County Council finds health, safety, and welfare of the road and the public will  
 375 not be negatively impacted. The Fire/Emergency Road may not be used as a secondary access. A  
 376 fire/emergency road must have controlled access on each end point to prevent ordinary daily  
 377 traffic. ~~If it is determined by the County Manager or the Fire Chief that a fire emergency road is~~  
 378 ~~required to be maintained on a year-round basis the surface material must be asphalt.~~

379 ~~1.— Twenty foot (20') wide road with road base, roto-mill tailings or asphalt surface course as~~  
 380 ~~shown on section 14.02.08, figure 7 of this chapter, and shall incorporate the following~~  
 381 ~~criteria:~~

382 ~~a.— Road Base Surface: Twenty foot (20') width of a minimum nine inches (9") of~~  
 383 ~~commercial road base. An additional section width may be required depending~~  
 384 ~~on subgrade soils.~~

b. ~~Roto Mill Tailing Surface: Twenty foot (20') width of a minimum of four inches (4") of roto mill tailings and six inches (6") of commercial road base. An additional section width may be required depending on subgrade soils.~~

c. ~~Asphalt Surface: Twenty foot (20') wide asphalt surface course with two (2) 2-foot gravel shoulders. A minimum section width of three inches (3") of asphalt and eight inches (8") of road base is required.<sup>1</sup>~~

d. ~~Road Grade: A four foot (4') wide ditch to be on the cut side of the road. If road grade is steeper than five percent (5%), the ditch is to be lined with a C-350 fabric or better, or six inches (6") of riprap. If the road grade is steeper than five percent (5%), check dams spaced no more than every two hundred feet (200') will be required.~~

H.G. ~~Year Round Basis: If it is determined by the County Manager or the Fire Chief that a fire emergency road is required to be maintained on a year round basis the surface material must be asphalt.~~

**I.H. Mountain Road (See section 14.02.08, Figure 8):** This road standard is designed for connective road traffic through mountainous terrain. It is not to allow frontage for any residential use. Potential traffic is less than 200 ADT. ~~Drainage to be controlled with a drainage swale, no curb and gutter. In areas where the profile grade is steeper than 5% the drainage swale must be lined with an approved fabric or rip rap.~~ No driveway access is allowed. A mountain road may not be plowed in the winter by the county maintenance department. Emergency services may not be available in areas accessed on Mountain Roads when there is snow on the road.

~~1. A twenty four foot (24') wide asphalt road as shown on section 14.02.08, figure 8 of this chapter, and shall incorporate the following criteria:~~

~~a. A twenty four foot (24') wide asphalt surface course with two (2) 2-foot wide gravel shoulders. A minimum section width of three inches (3") of asphalt and eight inches (8") of road base. An additional section width may be required depending on subgrade soils.~~

~~b. A five foot (5') wide ditch to be on the cut side of the road. If road grade is steeper than five percent (5%), the ditch is to be lined with a C-350 fabric or better, or six inches (6") of riprap. If the road grade is steeper than five percent (5%), check dams spaced no more than every two hundred feet (200') will be required.~~

**J.I. Shared Driveway (See section 14.02.08, Figure 9):** This standard, per 16.27.31, is designated for situations in which three or less residential homes share one driveway access. A shared driveway cannot be more than 500 feet long. All shared driveways shall be maintained, including snow removal activities, by the private residents. Drainage shall be controlled with adequate means to divert stormwater away from buildings. Added run-off must be accommodated in the overall detention design for the community. A stormwater plan must be approved by the engineering coordinator. A shared driveway must be designed to allow for emergency access to all buildings. If driveways extend beyond 150' from main access road, a turnaround must be provided for emergency vehicles. Shared driveways must have the express written consent of the fire marshal.

~~1. A twenty foot (20') wide asphalt road as shown on section 14.02.08, figure 9 of this chapter, and shall incorporate the following criteria:~~

~~a. A twenty foot (20') wide asphalt surface course with two (2) 2-foot wide gravel shoulders. A minimum section width of three inches (3") of asphalt and eight~~

431 inches (8") of road base. An additional section width may be required depending  
432 on the subgrade soils.

- 433 b. A five foot (5') wide ditch to be on the cut side of the road. If the road grade is  
434 steeper than five percent (5%), the ditch is to be lined with a C-350 fabric or  
435 better, or six inches (6") of riprap. If the road grade is steeper than five percent  
436 (5%), check dams spaced no more than every two hundred feet (200') will be  
437 required.

438 **K.J. Typical Utility Locations (See section 14.02.08, Figure 10):** Utilities in the road will be located  
439 as shown in section 14.02.08, figure 10 of this chapter.

440 **L.K. Alley Way Standard:** In some circumstances alleys can be used to enhance the  
441 pedestrian experience by removing driveways, garage openings, loading docks, garbage  
442 containers, utility services and other drive activities from the front of buildings. Alleys shall be  
443 used on a limited basis and will be private with public access and public utility easements. By  
444 utilizing alleys, some utilities, loading docks, dumpsters and other service needs are kept to the  
445 back of the buildings and away from the pedestrian amenities. Alleys are **not** intended as a tool to  
446 avoid having a public street or private pedestrian plaza that meets the standards of a public street  
447 at the front of the buildings. The use of alleys must be approved by either the Wasatch County  
448 Manager or the engineering coordinator, and also the Wasatch County Fire District.

449 **Definition:**

450 ~~1. "Alley" means a public access privately maintained within a block primarily intended for service and~~  
451 ~~access to abutting property by vehicles and not designed for general travel and only allowed when units~~  
452 ~~have frontage on a road or pedestrian plaza built to the applicable County standard.~~

453 **General Conditions:**

454 Alley or access may be permitted under the following conditions. If all conditions are not met  
455 then the use of alleys is prohibited.

- 456 1. ~~2-~~ Building access must be available from a public street or private street/plaza built to  
457 the public standard as well as the alley.

458 ~~— (a) Alleys or Lanes are built to specific standards as provided below.~~

- 459 2. The applicant must show all private improvements and how they will impact the alley,  
460 including garages or other structures, stairs, vaults, fences, walls, driveways, parking lots,  
461 walkways, or other improvements.

- 462 3. ~~(b)~~ Water and sewer utilities shall be in the street unless approved by the County  
463 Manager or the engineering coordinator. If underground wet utilities, sanitary sewer,  
464 waterlines, storm drains, etc. are installed in alleys, they shall be constructed prior to the  
465 surfacing of the alley and per Wasatch County Standards.

- 466 a. ~~(e)~~ If utilities are constructed within the alley then connections for all  
467 underground utilities and sanitary sewers shall be laid prior to the asphalt or  
468 concrete to avert the necessity for disturbing the alley improvements, when  
469 service connections thereto are made.

- 470 4. ~~1-~~ Alleys constructed of concrete will be 20' wide with an inverted crown and a centerline  
471 drainage collection system. Alleys constructed of concrete shall have a minimum

472 pavement section of 8 inches of PCC over ~~6 inches~~ six inches (6") of base rock, placed  
 473 over geotextile fabric, or approved per geotechnical recommendations and approved by  
 474 the County Manager or the engineering coordinator for H-2O loading. Asphalt  
 475 construction may only be used with a concrete water way for drainage at the center of the  
 476 alley. A minimum of 3" of asphalt over 9" of road base will be required. In conditions  
 477 where asphalt construction is used, concrete ribbon curbing will be required outside the  
 478 20' width of the asphalt section to protect the edge of the asphalt. Said curbing shall be 2'  
 479 wide for a total drivable surface of 24'.

- 480 a. If the natural soils have a CBR under 20, then a thicker section will be required  
 481 as determined by the developer's geotechnical engineer, with approval of the  
 482 County Manager or engineering coordinator. ~~The applicant must show all private~~  
 483 ~~improvements and how they will impact the alley, including garages or other~~  
 484 ~~structures, stairs, vaults, fences, walls, driveways, parking lots, walkways, or~~  
 485 ~~other improvements.~~
- 486 b. The applicant must indicate existing drainage patterns and show private drainage  
 487 inlets, outlets, and pipes beyond the alley right-of-way that will be impacted by  
 488 the alley construction.

489 ~~4.5. (d)~~ Joint Pattern: The PCC pavement shall be placed full width in one pour, with no  
 490 longitudinal joints. The alley design shall include a transverse joint pattern, shown on the  
 491 plans, so that the joints are spaced to create panel lengths that are 0.75 to 1.25 times the  
 492 alley width. The joint pattern will be coordinated to intersect with utility features such as  
 493 poles, manholes, and catch basins.

494 ~~5.6. (c)~~ Alley Approaches: The alley approaches shall be constructed as commercial driveways  
 495 in all respects, except that the structural section will be increased to 10 inches, or shall  
 496 match the alley pavement structure for which it provides access, or as approved per  
 497 geotechnical recommendations by the County Manager or the engineering coordinator for  
 498 H-2O loading, whichever is greater. Alley approaches with a standard curb return shall  
 499 not be used without approval of the County Manager or engineering coordinator.

500 ~~6.7. (e)~~ Length: Alleys shall be continuous from street to street wherever possible. If an alley  
 501 is not through and longer than 150 feet then a turnaround must be provided to  
 502 accommodate a fire truck as per code.

503 ~~7.8. (f)~~ Parking: No person shall park a vehicle within an "alley" except during the necessary  
 504 and expeditious loading and unloading of merchandise. No parking signs are required at  
 505 100 foot intervals. The alley must remain open at all times.

506 ~~8.9. (g)~~ Setbacks: Alley garage setbacks in residential uses shall be 20 feet or greater as  
 507 measured from the edge of the alley paving. Alley's leading to parking structures or to  
 508 commercial/hospitality uses such as hotels or retail shall have a minimum setback of 4  
 509 feet as measured from the edge of the alley paving. The four foot setback shall remain  
 510 open and unobstructed. If an alley exceeds 150 feet and is adjacent to buildings  
 511 exceeding 30 feet, then the alley must have 26 feet of hard surface for fire truck  
 512 downriggers. Parking garage structures shall have a side yard setback of no less than 15  
 513 ft.

514 ~~9.9. (h)~~ Snow Storage: An additional area of 15% of the alley paved area must be set  
 515 aside for snow storage. A snow storage plan exhibit must be submitted as part of the alley  
 516 plan to show that the required amount of snow storage has been provided.

517 ~~10.11. (i)~~ The alley must be allowed under the Land Use and Development Code.

518 ... All Wasatch County roads shall be classified by the county master transportation plan.

519 ~~L.~~

520 M. Wasatch County roadway design standards:

521

Roadway Functional Classification									
	Arterial	Major Collector	Minor Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
ROW Width	106'	75'	66'	60'	60'	60'	60'	60'	60'
Average Daily Trips	>8000	>8000	8000-2001	2,000-0	2,000-0	<50	Emergency Only	<200	<200
Single Family Units	<800	<800	<500	<500	<200	150-0	0	0	1-3
Pavement Width	46'	44'	34'	30'	30'	24'	20'	24'	20'
Side cut/fill slopes	3:1 up to 5 feet high and 2:1 above 5 feet						2:1	2:1	2:1
Horizontal Design Elements									
	Arterial	Major Collector	Minor Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum mid block centerline curve	Varies with V and Superelevation			100'	100'	100'	60'	75'	60'
Minimum tangent distance between reverse centerline curves	Varies with V and Superelevation			50'	50'	50'	40'	50'	40'

Cul-de-sac travelway turnaround diameter	Not Allowed			80'	80'	80'	80'	80'	80'
Maximum superelevation	6%	6%	6%	N/A					N/A
<b>Vertical Design Elements</b>									
	Arterial	Major Collector	Minor Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum crest vertical curve K value <sup>5</sup>	Varies with speed limit					19	19	19	19
Minimum sag vertical curve K value <sup>5</sup>	Varies with speed limit					37	37	37	37
Minimum length of vertical curve	Per traffic engineer	3*V	120'	80'	80'	60'	50'	60'	60'
Minimum centerline grade <sup>4</sup>	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Maximum centerline grade	<del>10</del> 8%	8%	10%	10%	10%	10%	10%	10%	10%
Maximum grade in cul-de-sac	Not Allowed			5%	5%	5%	5%	5%	5%

Maximum centerline grade across designated crosswalks	4%	4%	4%	5%	5%	5%	5%	5%	5%
Maximum grade break without vertical curve	0.50%	0.50%	0.50%	1%	1%	2%	2%	2%	2%
<b>Intersections</b>									
	Arterial	Major Collector	Minor Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Minimum angle of intersection	80°	80°	70°	60°	60°	60°	50°	50°	50°
Minimum offset between intersections	Study required	Study required	150'	125'	125'	125'	125'	125'	125'
Maximum centerline offset	0'	5'	5'	5'	5'	5'	5'	5'	5'
Maximum centerline grade across intersections <sup>67</sup>	4%	4%	4%	5%	5%	5%	5%	5%	5%

Minimum corner radius (edge of travelway)	30'	30'	30'	25'	25'	25'	25'	25'	25'
<b>Pavement Component Minimum Thickness<sup>7</sup></b>									
	Arterial	Major Collector	Minor Collector	Major Local	Major Local with Swale	Agricultural Seasonal Road	Fire Emergency	Mountain Road	Shared Driveway
Asphalt Concrete	Per geotechnical report, 4" minimum			3"	3"	3" if required	3" if required	3"	3"
Road Base	<u>Per geotechnical report, 9" minimum</u>			8"	8"	9"	8"	8"	8"
Subbase	PER SECTION 14.02.07, SECTION L.								
Subgrade	PER SECTION 14.02.07, SECTION L.								

General Road Design Notes:

1. Sub Grade preparation and road section to be per 14.02.01 (L).

~~2. Road to have a minimum of 3 inches of asphalt.~~

~~32.~~ Permanent erosion control mat\* or minimum six inches (6") thick rip rap required for ~~ditch~~ drainage swale/ditch slopes greater than 5 percent.

~~43.~~ Check dams required ~~for ditch slopes greater than 5 percent~~ as shown for each cross section.

~~54.~~ Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.

~~65.~~ Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than eight feet (8') feet.

~~76.~~ All disturbed surfaces shall be covered with ~~6 inches~~ six inches (6") of topsoil and seeded.

7. The primary street of the intersection shall not exceed the maximum centerline grades as allowed for each of the roadway functional classifications. Stop controlled secondary intersection grades must not exceed the reduced approach values as given in this table. The intersection centerline approach grades of the secondary or intersecting street must extend at least one hundred feet (100') beyond the edge of the paved traveled way of the outside lane of the primary through street before exceeding these values.

N. Exceptions. Exceptions to the requirements of Sections 14.02.04 - 14.02.13 may be approved, denied, and appealed as follows:

1. Engineering Coordinator: The engineering coordinator shall approve or deny exceptions to sections 14.02.04 - 14.02.13 as follows:

...

e. Requirements For Granting Exception: For Sections 14.02.04 - 14.02.13, but excepting 14.02.05 and 14.02.06 which requirements are listed therein, the

546 engineering coordinator may grant an exception only if all of the following  
547 conditions are proven by the applicant:

548 ...

549 (6) Unreasonable Hardship: In determining whether or not enforcement of  
550 sections 14.02.04 - 14.02.05 & 14.02.07 - 14.02.13 would cause  
551 unreasonable hardship under (N) (1)(e)(1) of this section, the ~~Wasatch~~  
552 ~~County Council Engineering Coordinator~~ may not find an unreasonable  
553 hardship unless the alleged hardship:

554 ...

555 2. Appeals to the Appeals Hearing Officer. The applicant or adversely affected party may  
556 appeal the approval or denial of the exception application by alleging that there is an  
557 error in any order, requirement, decision or determination made by the engineering  
558 coordinator. Appeals shall be filed in the office of the County Manager within ten (10)  
559 days of the date the engineering coordinator issues the administrative decision. The  
560 person or entity making the appeal has the burden of proving that an error has been made  
561 by the engineering coordinator. The application for appeal shall include an application  
562 fee as listed in the fee table. The appeal shall meet the requirements of, and shall be  
563 conducted in accordance with Section 2.02.02.

564 3. Appeals to the District Court. An exception applicant or adversely affected party may file  
565 a petition for review of the decision of the ~~Board of Adjustment Appeals Hearing Officer~~  
566 with the district court within 30 days after the decision of the ~~Board of~~  
567 ~~Adjustment Appeals Hearing Officer~~ is issued.

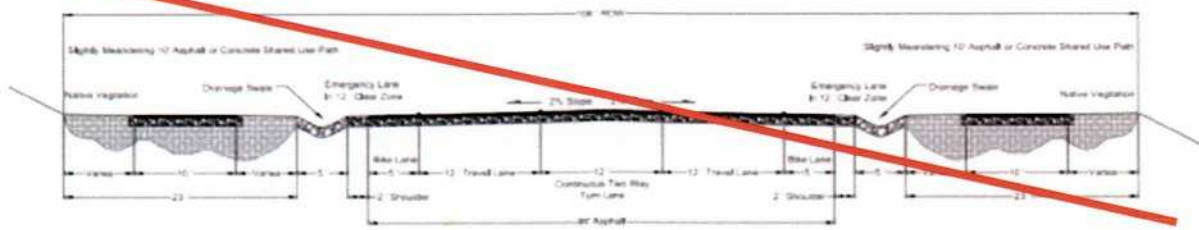
568 4. Appeals of final decisions applying the standards governed under this subsection are  
569 made pursuant to WCC 14.02.04, except for exception application.

570 O. Lot Frontage: Any roads which are approved as part of a development shall have a minimum of  
571 150' of lot frontage, or the Developer shall be required to establish a Home Owners Association  
572 which, after the maintenance is turned over to the HOA from the developer after the development  
573 successfully passes through the warranty period, shall be responsible for maintaining the road  
574 forever, including providing snow plowing services on the road. If applicable, this requirement,  
575 with appropriate enforcement mechanisms, shall be memorialized in the subdivision plat, and in  
576 the development agreement if a development agreement is entered into for the development.

577 **14.02.08: ROAD STANDARDS**

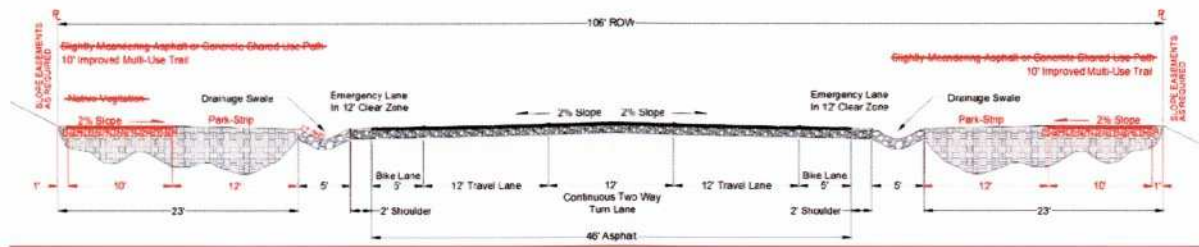
578 **Printable images of these road standard cross sections can be found by following this link.**  
579 <https://www.wasatch.utah.gov/Departments/Engineering>

106' Arterial Cross Section  
Figure 1



580

106' Arterial Cross Section  
Figure 1



581

582 Notes:

- 583 1. Sub Grade preparation and road section to be per 14.02.07 L.
- 584 2. All disturbed surfaces shall be covered with 6 inches six inches (6") of topsoil and seeded.
- 585 3. Lane striping as per cross section.
- 586 4. Shoulder will be constructed with compacted road base. The subtle meandering shared use
- 587 path Improved Multi-Use Trail will have 3 inches three inches (3") of asphalt over 9 inches six inches (6")
- 588 of road base.
- 589 5. Road will have a minimum of four inches (4") of asphalt over nine inches (9") of road base.
- 590 6. Permanent erosion control mat\* or minimum six inches (6") thick rip rap required in drainage swale for
- 591 road slopes greater than 5% with check dams spaced no more than every two hundred feet (200').
- 592 7. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 593 8. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 594 eight feet (8').

595

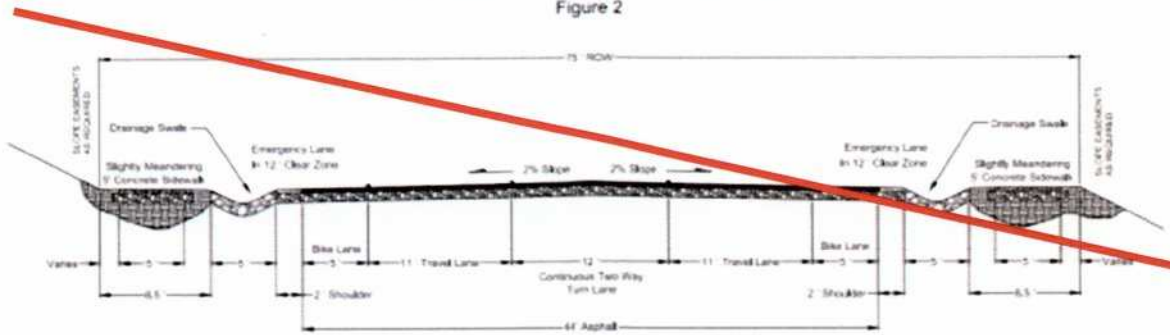
596 \* PERMANENT EROSION CONTROL MAT TO CONFORM TO THE FOLLOWING:

- |     |                                      |                 |
|-----|--------------------------------------|-----------------|
| 597 | • THICKNESS                          | 0.4 IN          |
| 598 | • GROUND COVER FACTOR                | 74%             |
| 599 | • TENSILE STRENGTH                   | 170 X 125 LB/FT |
| 600 | • TENSILE ELONGATION                 | 50% MAX         |
| 601 | • ULTRAVIOLET STABILIZATION 1000 HRS | 80%             |

602

75' Major Collector Cross Section

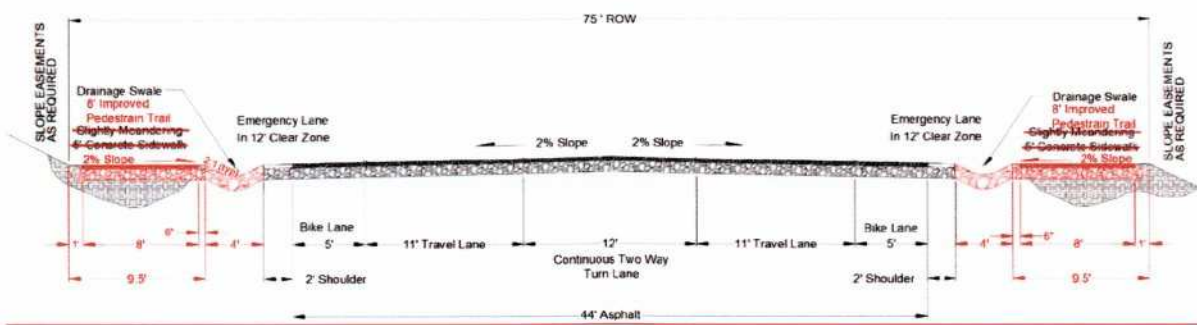
Figure 2



603

75' Major Collector Cross Section

Figure 2



604

Notes:

- 605 1. Sub Grade preparation and road section to be per 14.02.07 L.
- 606 2. The ~~subtle meandering shared use path~~ Improved Pedestrian Trail will have ~~5-inch~~ three inches (3") of
- 607 ~~concrete asphalt~~ over ~~six (6")~~ inches of road base.
- 608 3. All disturbed surfaces shall be covered with ~~6-inch~~ six inches (6") of topsoil and seeded.
- 609 4. Lane striping as per cross section.
- 610 5. Shoulder will be constructed with compacted road base.
- 611 6. Road will have a minimum of four inches (4") of asphalt over ~~9-nine~~ nine inches (9") of road base.
- 612 7. Permanent erosion control mat\* or minimum 6" thick rip rap required in drainage swale for road slopes
- 613 greater than 5% with check dams spaced no more than every two hundred feet (200').
- 614
- 615 8. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 616 9. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 617 eight feet (8').

618

619 \*PERMANENT EROSION CONTROL MAT TO CONFORM TO THE FOLLOWING:

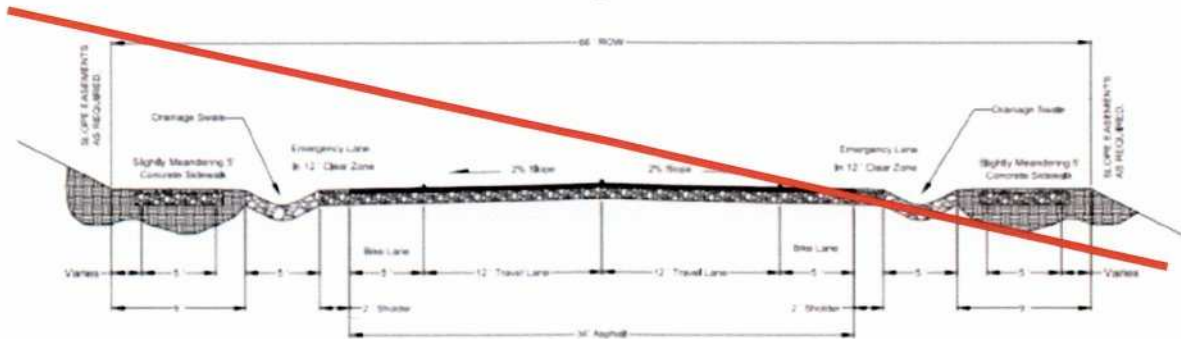
620	• THICKNESS	0.4 IN
621	• GROUND COVER FACTOR	74%
622	• TENSILE STRENGTH	170 X 125 LB/FT
623	• TENSILE ELONGATION	50% MAX

624 • ULTRAVIOLET STABILIZATION 1000 HRS 80%

625

## 66' Minor Collector Cross Section

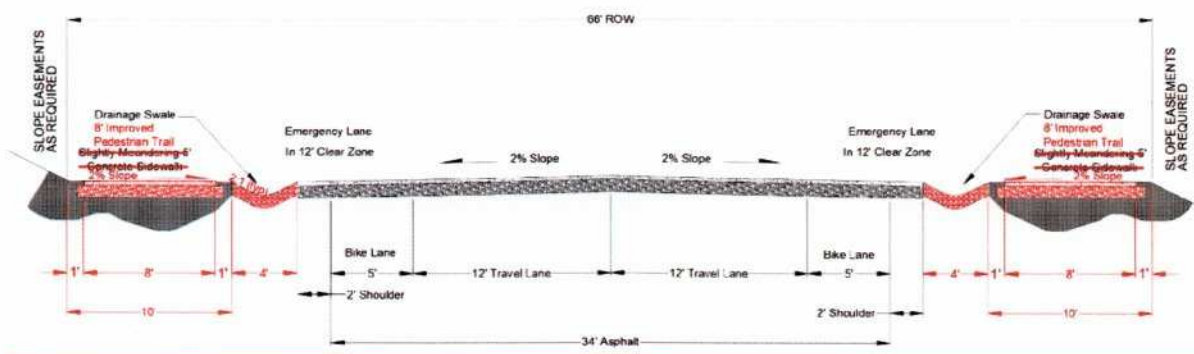
Figure 3



626

## 66' Minor Collector Cross Section

Figure 3



627

628 Notes:

- 629 1. Sub Grade preparation and road section to be per 14.02.07 L.
- 630 2. The ~~subtle meandering shared-use path~~ Improved Pedestrian Trail will have ~~5 inches~~ three inches (3") of
- 631 ~~concrete asphalt~~ over ~~six inches (6")~~ 6 inches of road base.
- 632 3. All disturbed surfaces shall be covered with ~~6 inches~~ six inches (6") of topsoil and seeded.
- 633 4. Lane striping as per cross section.
- 634 5. Shoulder will be constructed with compacted road base.
- 635 6. Road will have a minimum of four inches (4") of asphalt over nine inches (9") of road base.
- 636 7. Permanent erosion control mat\* or a minimum of six inches (6") of rip rap required for ~~ditch drainage~~
- 637 swale slopes greater than 5% with check dams spaced no more than every two hundred feet (200').
- 638 8. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 639 9. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 640 eight feet (8').

641

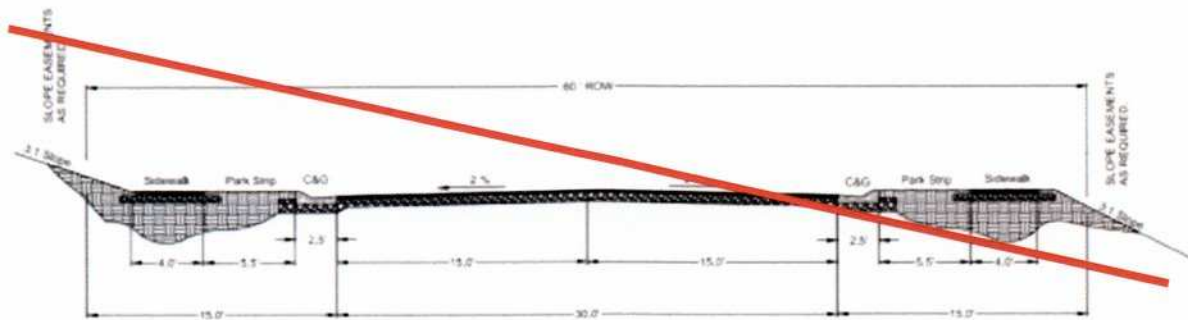
642 \*PERMANENT EROSION CONTROL MAT TO CONFORM TO THE FOLLOWING:

643	• THICKNESS	0.4 IN
644	• GROUND COVER FACTOR	74%
645	• TENSILE STRENGTH	170 X 125 LB/FT
646	• TENSILE ELONGATION	50% MAX
647	• ULTRAVIOLET STABILIZATION 1000 HRS	80%

648

### 60' Major Local Cross Section

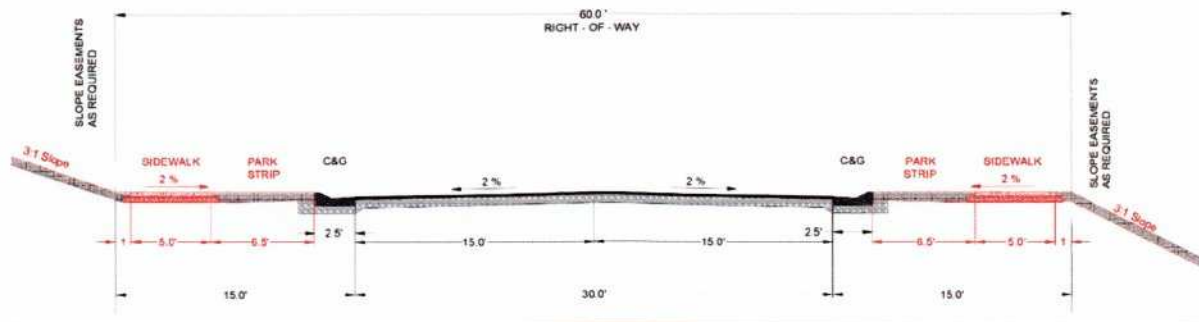
Figure 4



649

### 60' Major Local

Figure 4



650

651

Notes:

652

1. Sub Grade preparation and road section to be per 14.02.07 L.

653

2. The sidewalk will have five inches (5") of concrete over 6 inches six inches (6") of road base.

654

3. All disturbed surfaces require 6 inches six inches (6") of topsoil and seeded.

655

4. Road will have a minimum of three inches (3") of asphalt over eight inches (8") of road base.

656

5. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.

657

6. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than eight feet (8').

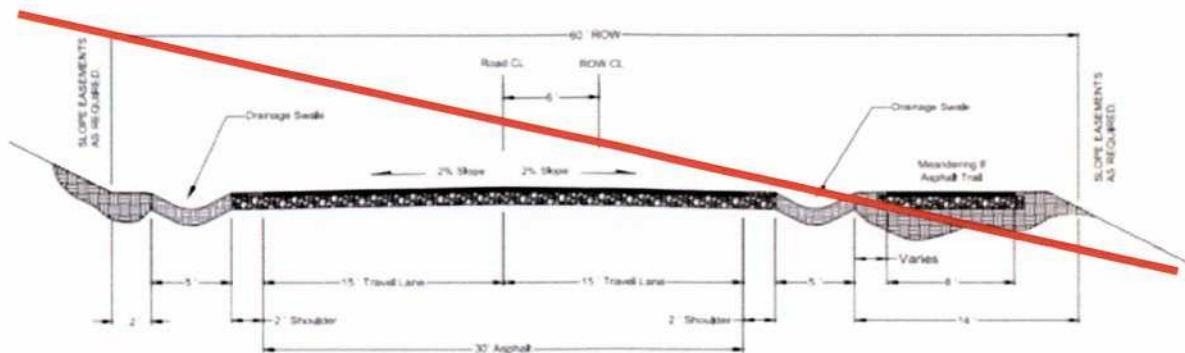
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660

60' Major Local with Swales Cross Section

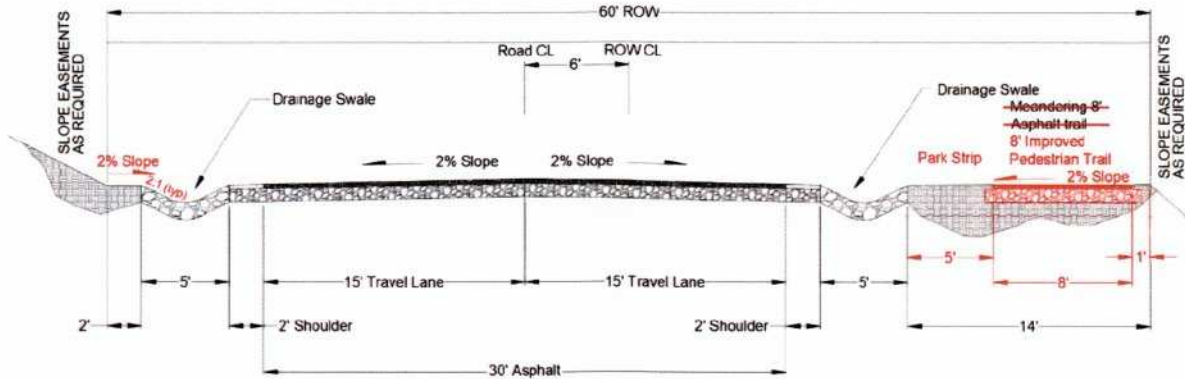
Figure 5



661

60' Major Local with Swales Cross Section

Figure 5



662

Notes:

1. Sub Grade preparation and road section to be per 14.02.07 L.
2. The ~~meandering shared use path~~ Improved Pedestrian Trail will have ~~5 inches three inches (3") of concrete asphalt~~ over ~~six inches (6")~~ 6 inches of road base.
3. All disturbed surfaces shall be covered with ~~6 inches~~ six inches (6") of topsoil and seeded.
4. Shoulder will be constructed with compacted road base.
5. Road will have a minimum of ~~3 inches~~ three inches (3") of asphalt over eight inches (8") of road base.
6. Permanent erosion control mat\* required for drainage swale slopes greater than 5 percent. Drainage swales to be topsoil and seeded. ~~Rip Rap will not be allowed. No cobble lined or rip rap ditch drainage swales.~~
7. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
8. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than eight feet (8').
- ~~9 Permanent erosion control mat\* required for ditch slopes greater than 5 percent.~~

\*Permanent erosion control mat to conform to the following minimum specifications:

- |     |                       |        |
|-----|-----------------------|--------|
| 678 | • THICKNESS           | 0.4 IN |
| 679 | • GROUND COVER FACTOR | 74%    |

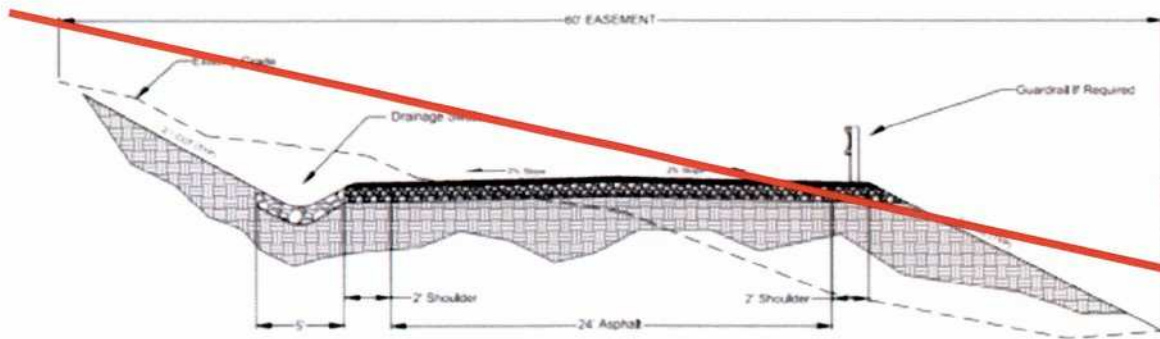
- 680 • TENSILE STRENGTH 170 X 125 LB/FT
- 681 • TENSILE ELONGATION 50% MAX
- 682 • ULTRAVIOLET STABILIZATION 1000 HRS 80%

683

684

### Agricultural / Seasonal Road

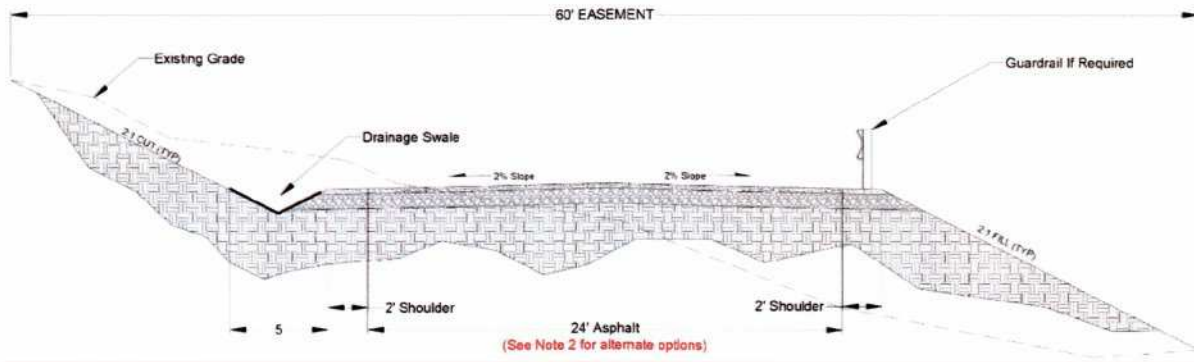
Figure 6



685

### Agricultural / Seasonal Road

Figure 6



686

687

Notes:

688

1. Sub Grade preparation and road section to be per 14.02.07 L.

689

2. Shoulder will be constructed with compacted nine inches (9") road base. Road will have a minimum of Section width to be a minimum of the following: nine inches (9") of road base, or four inches (4") of roto-mill tailings over six inches (6") of road base, or three inches (3") of asphalt over nine inches (9") of road base. (The rendering above only shows asphalt, but these other surfaces ~~are~~ may also be allowed through County Council approval as specified in this chapter, section 14.02.07.F – Agricultural/Seasonal Road)

692

3. Permanent erosion control mat\* or a minimum of six inches (6") of rip rap required for ditch-drainage

694

swale slopes greater than 5 percent.

695

- 696 4. Check dams, spaced no more than every two hundred feet (200'), required for ditch drainage swale
- 697 slopes greater than 5 percent.
- 698 5. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 699 6. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 700 eight feet (8')~~8 feet~~.
- 701 7. All disturbed surfaces shall be covered with 6 inches six inches (6") of topsoil and seeded.

702  
703

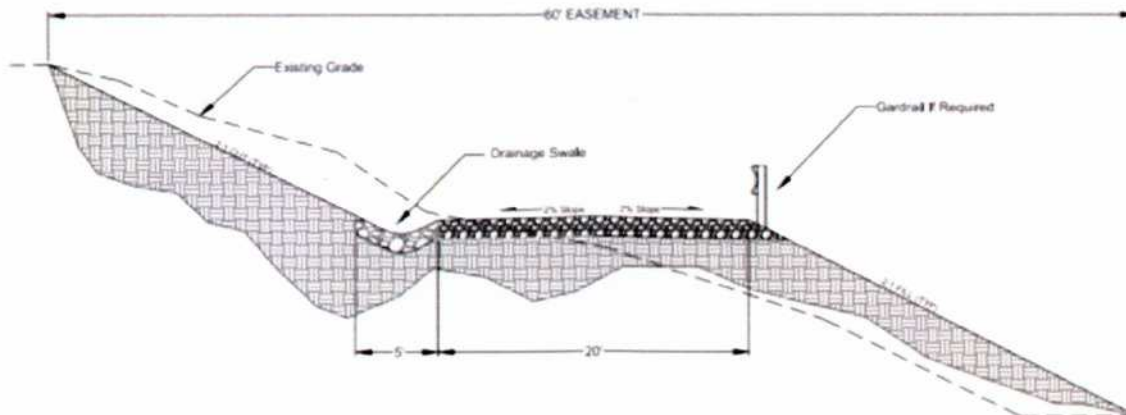
\* Permanent erosion control mat to conform to the following minimum specifications:

704	• THICKNESS	0.4 IN
705	• GROUND COVER FACTOR	74%
706	• TENSILE STRENGTH	170 X 125 LB/FT
707	• TENSILE ELONGATION	50% MAX
708	• ULTRAVIOLET STABILIZATION 1000 HRS	80%

709

### Fire / Emergency Road

Figure 7



710

711 Notes:

- 712 1. Fire/emergency roads will have no lot frontage and will have controlled access on each end of the road,
- 713 restricting any traffic using them, unless for the purpose of an emergency.
- 714 2. Sub Grade preparation and road section to be per 14.02.07 L.
- 715 3. If plowed, must have a minimum of 3 inches three inches (3") of asphalt over eight inches (8") of road
- 716 base. Other road surfaces (road base only or roto-mill tailings) may be allowed through County Council
- 717 approval as specified in this chapter, section 14.02.07.G – Fire/Emergency Road. If approved, other
- 718 options include: nine inches (9") of road base or four inches (4") of roto-mill tailings over six inches (6")
- 719 of road base.
- 720 4. Permanent erosion control mat\* or a minimum of 6 inches six inches (6") of rip rap required for ditch
- 721 drainage swale slopes greater than 5 percent.
- 722 5. Check dams, spaced no more than every two hundred feet (200'), required for drainage swale slopes
- 723 greater than 5 percent.~~Check dams required for ditch slopes greater than 5 percent.~~
- 724 6. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 725 7. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 726 eight feet (8').

727 8. All disturbed surfaces shall be covered with 6-inchesix inches (6") of topsoil and seeded.

728

729 \* Permanent erosion control mat to conform to the following minimum specifications:

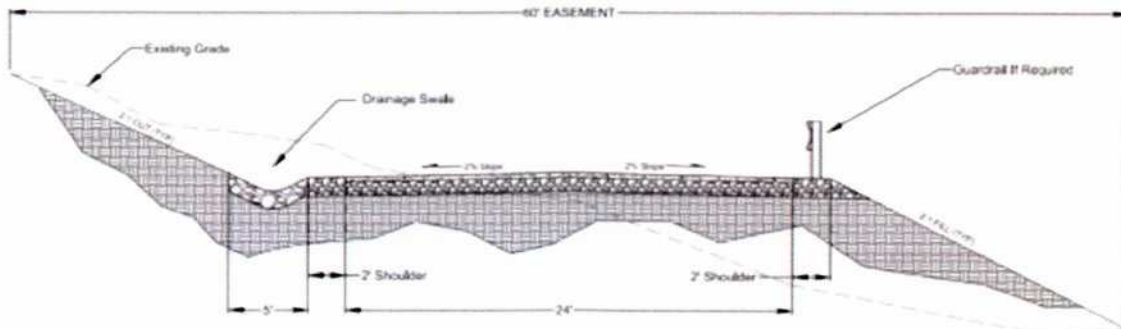
- 730 • THICKNESS 0.4 IN
- 731 • GROUND COVER FACTOR 74%
- 732 • TENSILE STRENGTH 170 X 125 LB/FT
- 733 • TENSILE ELONGATION 50% MAX
- 734 • ULTRAVIOLET STABILIZATION 1000 HRS 80%

735

736

### Mountain Road

Figure 8



737

738

739 Notes:

740 1. Sub Grade preparation and road section to be per 14.02.07 L.

741 2. Road to have a minimum of 3-inchesthree inches (3") of asphalt over eight inches (8") of road base.

742 3. Shoulder will be constructed with eight inches (8") of compacted road base.

743 ~~34.~~ Permanent erosion control mat\* or a minimum of six inches (6") of rip rap required for ditch-drainage

744 swale slopes greater than 5 percent.

745 45. Check dams, spaced no more than every two hundred feet (200'), required for drainage swale slopes

746 greater than 5 percent. Check dams required for ditch slopes greater than 5 percent.

747 ~~56.~~ Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.

748 ~~67.~~ Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than

749 eight feet (8')8 feet.

750 ~~78.~~ All disturbed surfaces shall be covered with 6-inchesix inches (6") of topsoil and seeded.

751

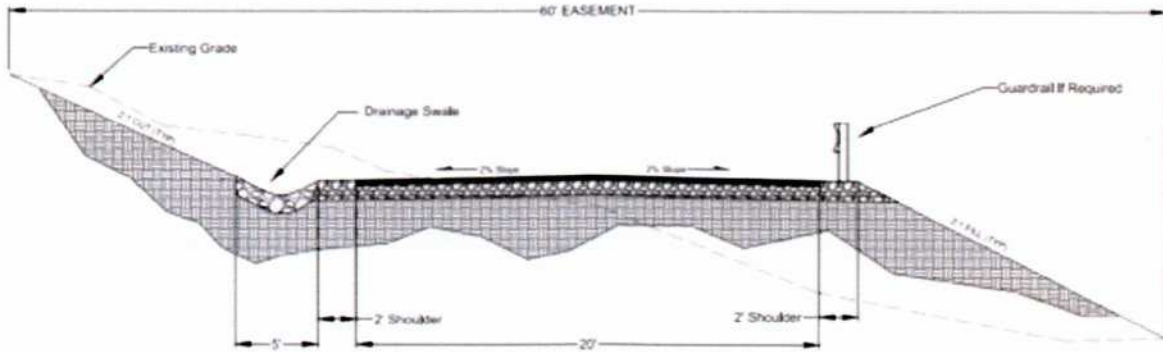
752 \* Permanent erosion control mat to conform to the following minimum specifications:

- 753 • THICKNESS 0.4 IN
- 754 • GROUND COVER FACTOR 74%
- 755 • TENSILE STRENGTH 170 X 125 LB/FT
- 756 • TENSILE ELONGATION 50% MAX
- 757 • ULTRAVIOLET STABILIZATION 1000 HRS 80%

758

## Shared Driveway

Figure 9



759  
760  
761

762 Notes:

- 763 1. Per section 16.27.31 of this code, shared driveways can only service 3 lots or less.
- 764 2. Sub Grade preparation and road section to be per 14.02.07 L.
- 765 3. Road to have a minimum of ~~3 inches~~ three inches (3") of asphalt over eight inches (8") of road base.
- 766 4. Shoulder will be constructed with eight inches (8") of compacted road base.
- 767 5. Permanent erosion control mat\* or a minimum of six inches (6") of rip rap required for ~~ditch drainage~~
- 768 swale slopes greater than 5 percent.
- 769 ~~56. Check dams, spaced no more than every two hundred feet (200'), required for drainage swale slopes~~
- 770 greater than 5 percent. Check dams required for ditch slopes greater than 5 percent.
- 771 67. Cut or fill slopes steeper than 3:1 to be designed and approved by a geotechnical engineer.
- 772 78. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than
- 773 eight feet (8') feet.
- 774 89. All disturbed surfaces shall be covered with ~~6 inches~~ six inches (6") of topsoil and seeded.

775  
776

\* Permanent erosion control mat to conform to the following minimum specifications:

- |     |                                      |                 |
|-----|--------------------------------------|-----------------|
| 777 | • THICKNESS                          | 0.4 IN          |
| 778 | • GROUND COVER FACTOR                | 74%             |
| 779 | • TENSILE STRENGTH                   | 170 X 125 LB/FT |
| 780 | • TENSILE ELONGATION                 | 50% MAX         |
| 781 | • ULTRAVIOLET STABILIZATION 1000 HRS | 80%             |

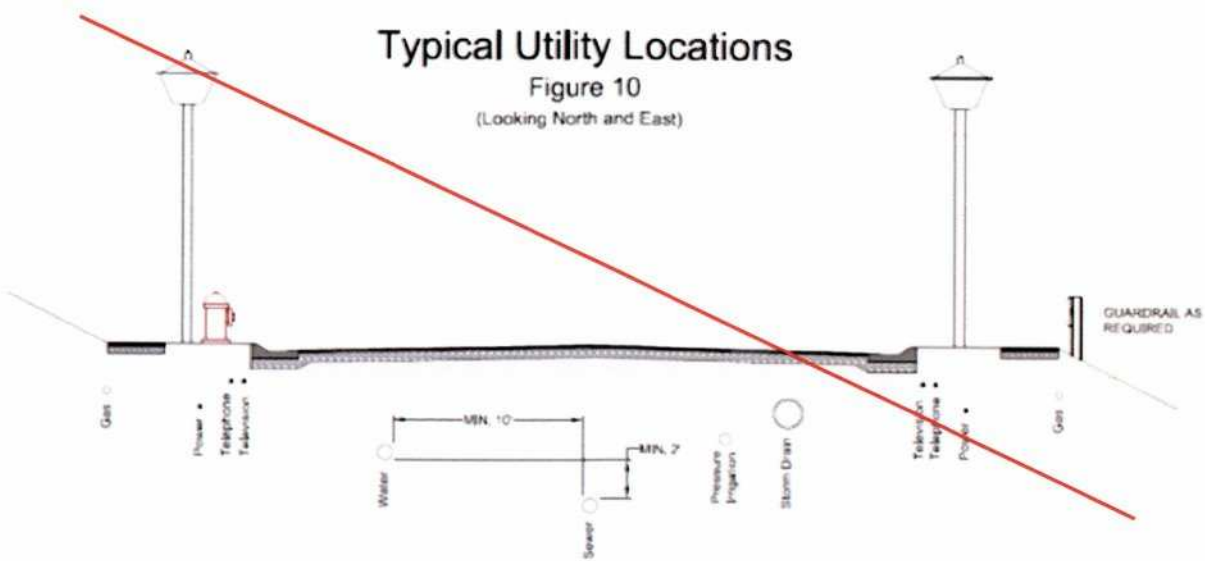
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### Typical Utility Locations

Figure 10

(Looking North and East)

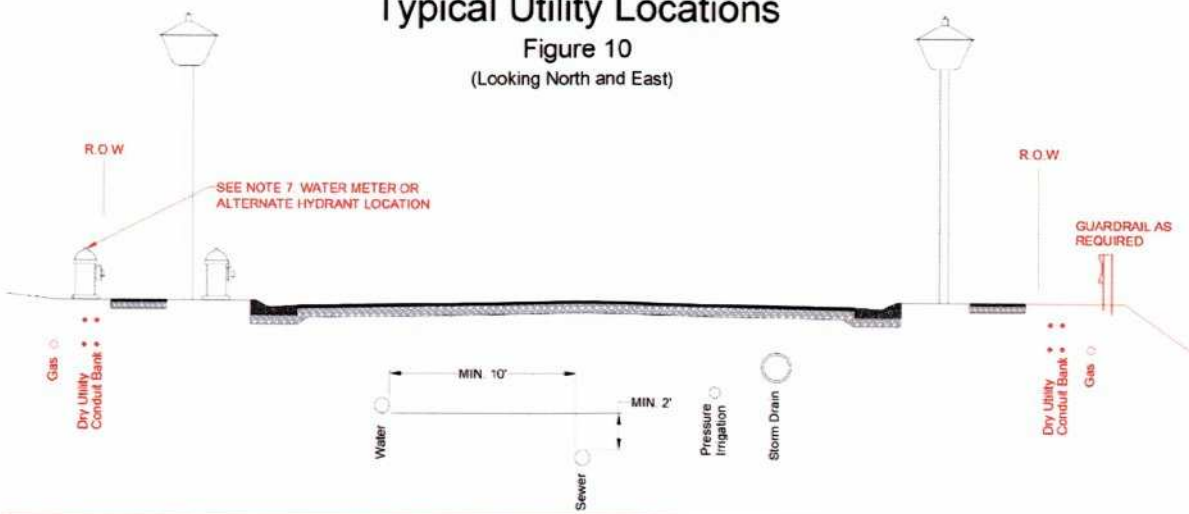


784

### Typical Utility Locations

Figure 10

(Looking North and East)



785

### 786 Typical Cover Over Utilities

787 \* Sewer, 8 feet

788 \* Water per local water agency

789 \* Storm drain, 30 inches minimum

790 \* Gas, 30 inches

791 \* Power, 40 inches

792 \* Communication, 24 inches Dry utility typical cover depths are per company specification

793

### 794 Typical Utility Separation

- 795 \* Sewer/water - 10 feet horizontal, 2 feet vertical  
 796 \* ~~Dry utility typical horizontal separation distances are per company specification~~Gas—minimum 3 feet  
 797 ~~horizontal~~  
 798 \* ~~Power—minimum 12 inches horizontal~~  
 799 \* ~~Communication—minimum 12 inches horizontal~~

800 Notes:

- 801 1. Streetlights required at fire hydrants and intersections.  
 802 2. Fire hydrant spacing per current international fire code.  
 803 3. Minimum vertical clearance where closer than ten feet (10') feet-or at sewer/water crossing.  
 804 4. Sign locations per current MUTCD code.  
 805 5. Sewer manholes to be located in center of road, not to conflict with centerline survey monuments.  
 806 6. No dry utilities including gas, power, telephone, or cable will be allowed under the paved road section  
 807 except at localized crossings. Any dry utilities under the road will be encased in conduit.  
 808 7. Hydrant location determined by speed and road grade. May be required to be on back of walk as  
 809 shown. Where swales exist or it is infeasible to place hydrant in the park-strip, hydrants shall be placed in  
 810 the public utility easement at the property line. Power and gas shall avoid hydrants and water meters.  
 811 8. Guardrail required on all fill slopes steeper than 3:1 where the vertical drop of the slope is greater than  
 812 eight feet (8') feet.  
 813 ...

814 **14.02.10: APPENDIX B TO TITLE 14; DRIVEWAYS AND ENCROACHMENTS;**  
 815 **REQUIREMENTS AND SPECIFICATIONS**

816 ...

- 817 C. Spacing: Access driveways or encroachments shall be spaced according to the following  
 818 (graphically shown in 16.37.06):  
 819 1. Minimum distance as measured from the street right-of-way line. If the street right-of-  
 820 way line is in a non-standard location, the Planning and Engineering Departments must  
 821 evaluate and agree on the location to measure the spacing from intersections:  
 822 a. Street type, local:  
 823 (1) Minimum spacing: ~~Thirty-five~~Thirty-five feet (35') apart;  
 824 (2) From intersections: ~~Fifty-Fourty~~Forty feet (50'~~40'~~).

825 ...

826 **16.27.12: FINAL PLAT REQUIREMENTS**

827 ...

- 828 K. Front public utility easements: A fifteen-foot (15') public utility easement except where the  
 829 zoning has less than a thirty-foot (30') building setback, in which case, the front public utility  
 830 easement shall be ten feet (10'). If the development includes a village center or commercial use,  
 831 the county planner, in coordination with the development review committee, shall identify the  
 832 appropriate location for the public utility easement;  
 833 ~~K.L.~~ Side and rear yard public utility easements: A ten-foot (10') public utility easement, ~~on~~  
 834 all sides of the lot, except whereIf the development includes a village center or commercial use,

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The county planner, in coordination with the development review committee, shall identify the appropriate location for the public utility easement;

~~1. Owner's dedications which shall contain the following elements, if applicable:~~

~~a. The owner shall dedicate and convey to the owners of the lots in all phases of the development all open space, common areas, private trails, private roads, and any other property labeled on the plat as common;~~

~~b.a. The owner shall dedicate all property labelled on the plat as public to the public, and all utility easements to the public for use of utility companies as allowed by Wasatch County;~~

~~e.a. The owner shall dedicate to Wasatch County, or such other entity as has been approved by the County Council, an open easement in all open space, which shall typically contain the following elements: the owner hereby grants Wasatch County an open space easement in all property shown on this plat as open space. No structure or other development shall be permitted on the open space except as approved by the Wasatch County legislative body. Open space will be labeled as common area, though plat notes shall indicate the required open space easement, unless otherwise approved under Section 16.21.06.~~

~~2.1. Lienholder's consent, if applicable;~~

~~3.1. Owner's surveyor's certificate of accuracy of survey;~~

~~4.1. County surveyor's approval;~~

~~5.1. Planning commission approval, if applicable;~~

~~6.1. Special service district approval, if applicable;~~

~~7.1. County manager's approval of the plat and the acceptance of dedications of public lands, streets and easements;~~

~~8.1. County fire marshal's approval;~~

~~9.1. County attorney's approval as to form;~~

~~10.1. Health department approval;~~

~~11.1. Public works approval;~~

~~12.1. County planning office approval;~~

~~13.1. Wasatch County water board;~~

~~14.1. Engineering department approval;~~

M. Owner's dedications which shall contain the following elements, if applicable:

1. The owner shall dedicate and convey to the owners of the lots in all phases of the development all open space, common areas, private trails, private roads, and any other property labeled on the plat as common;

875           2. The owner shall dedicate all property labelled on the plat as public to the public, and all  
876           utility easements to the public for use of utility companies as allowed by Wasatch  
877           County;  
878

879           3. The owner shall dedicate to Wasatch County, or such other entity as has been approved  
880           by the County Council, an open easement in all open space, which shall typically contain  
881           the following elements: the owner hereby grants Wasatch County an open space  
882           easement in all property shown on this plat as open space. No structure or other  
883           development shall be permitted on the open space except as approved by the Wasatch  
884           County legislative body. Open space will be labeled as common area, though plat notes  
885           shall indicate the required open space easement, unless otherwise approved under Section  
886           16.21.06.  
887

888           N. Lienholder's consent, if applicable;

889           O. Owner's surveyor's certificate of accuracy of survey;

890           P. County surveyor's approval;

891           Q. Planning commission approval, if applicable;

892           R. Special service district approval, if applicable;

893           S. County manager's approval of the plat and the acceptance of dedications of public lands, streets  
894           and easements;

895           T. County fire marshal's approval;

896           U. County attorney's approval as to form;

897           V. Health department approval;

898           W. Public works approval;

899           X. County planning office approval;

900           Y. Wasatch County water board;

901           ~~M. Engineering department approval;~~

902           Z.

903           AA. Notary public's acknowledgement for each owner's dedication.

904           BB. A two-inch by three-inch (2" x 3") space at the bottom right hand corner for the Wasatch County  
905           Recorder.

906

907           ~~A two inch by three inch (2" x 3") space at the bottom right hand corner for the Wasatch County~~  
908           ~~Recorder.~~

909           ...