

PUBLIC WORKS AND DEVELOPMENT/ENGINEERING DIVISION

ADMINISTRATIVE PROCEDURE DIRECTIVE 86-6

Subject: Construction Specification Tolerances

Effected Area: Construction specification tolerances to be used for developer constructed streets. To be used during the construction, probationary or final acceptance process.

Proposed By: Jeffrey L. Scott, Chief Engineering Inspector

Recommended By:

APPROVED:

Director, Public Works and Development

Date

CONSTRUCTION SPECIFICATION TOLERANCES

I. PURPOSE

Below is a construction specification tolerance list to aid in the construction of a subdivision improvement, and to provide technical guidelines for probationary and final acceptances by Arapahoe County Public Works and Development/Engineering Division. It is to be used by the owner/developer prior to any acceptance inspection for repairs or replacement of work to meet Arapahoe County standards and specifications. It will be used by Arapahoe County as guidelines during construction, probationary and final acceptances.

This list of construction specification tolerances are additions to the latest edition of the Colorado Department of Highways Standard Specification for Road and Bridge Construction, special provisions and revisions thereto and by the current subdivision regulations of Arapahoe County, Colorado.

II. TOLERANCES

A. Curb, gutter and walk, crossspan, radii, etc.

1. Any localized humps and or depressions greater than $\frac{1}{4}$ inch will require removal and replacement of the work in question.
2. No ponding of water greater than $\frac{3}{8}$ inch shall be allowed.
3. Combination curb, gutter and walk and/or vertical curb and gutter flowline depth shall not vary from adopted standards by more than $+\frac{1}{2}$ inch, measured vertically from the top of curb to the gutter invert.
4. Pedestrian walks shall have a minimum of 2.0% and a maximum of 2.5% slope toward the roadway.
5. Contraction and construction joints shall be placed at a standard spacing of 10 feet in curb, gutter, sidewalks, crossspans, trickle channel, etc. A minimum spacing of 5 feet will be allowed for repairs.
6. Heave or settlement of sidewalk, relative to separate curb pour, greater than $\frac{1}{2}$ inch shall be cause for corrective action. This provision shall not apply to transverse sidewalk joints.

B. Roadways

1. Gravel Roadways
 - a) If a gravel surface is the final surface for the roadway or shoulder then the manholes, water valves, etc. shall be buried 6 inches + 1 inch below the final grade.
2. Asphalt Roadways
 - a) All manholes, water valves, range boxes, etc. shall be $\frac{1}{2}$ inch to $\frac{3}{4}$ inch below the final paved grade. The finish grade of pavement shall be $\frac{1}{4}$ inch above the rim elevation with a two foot transition provided.

- b) Any humps and depressions greater than ¼ inch in 5 feet as measured with a 10 foot straight edge shall be cause for corrective measures.
 - c) Additional asphalt thickness of up to ½ inch will be permitted at the joint of the roadway and gutter pan and will be included in the actual asphalt thickness. Corrective action may be required for additional asphalt in excess of ½ inch above the gutter pan be included in the asphalt thickness for acceptance purposes.
3. Concrete Roadways
- a) All manholes, water valves, range boxes, etc. shall be flush to ¼ inch below the final surface roadway grade.
 - b) Where the departure from the design cross slope exceeds ½ inch in 10 feet the pavement shall be removed and replaced.
 - c) Areas showing high spots greater than 1/8 inch but less than ½ inch in 10 feet shall be ground to within 1/8 inch of design evaluation.

III. GENERAL SPECIFICATIONS

A. Curb, gutter and walk, crosspans, radii, etc.

- 1. No utility facilities shall be placed in curb, gutter or walk, crosspans, radii, etc. unless shown on the approved construction plans. This includes water stop box, manholes, power poles, fire hydrants, water valves, etc.
- 2. Concrete Cracks
 - a) At the time of probationary acceptance inspection, the repair of cracks may be deferred if determined by Arapahoe County not to warrant immediate repairs.
 - b) At the time of final acceptance inspection, the repair of all cracks will be completed.
 - 1. Cracks that are less than ¼ inch wide, exhibit no horizontal or vertical shifting, and do not meet the conditions in 2), 3) and 4) below may, at the discretion of Arapahoe County, be sealed by routing approximately ¾ inch to 1 inch deep by ¼ inch wide and filling with Sikaflex 1-A or equal.
 - 2. Any crack that extends through a joint shall require removal and replacement of the entire cracked area.
 - 3. Any crack in a 4 inch thick walk will require removal and replacement of the entire cracked section between joints.
 - 4. Any longitudinal cracked section of concrete will require complete removal and replacement of that section between joints.
 - 5. Repair action for hairline cracks as determined in 1) above may be waived at the discretion of Arapahoe County. For the purpose of this section, a hairline crack is one that is reasonably immeasurable and without separation as determined by Arapahoe County.

3. Final Grade

- a) A light broom finish (not to expose the aggregate) to all concrete shall be required.
- b) All concrete work shall have the proper finished grade. No reversal of the flow path will be accepted by Arapahoe County.
- c) No abrupt changes in grade shall be allowed, i.e., curb returns from new to existing, driveway entrances, etc.

B. Roadways

1. Asphalt

- a) All cracks in the asphalt shall be sealed with rubberized asphalt sealant approved by Arapahoe County, to include cracks or open sawed joints at patch areas (see Arapahoe County Department of Highways Procedure 85-13).

2. Concrete

- a) All construction, contraction and expansion joints shall be placed in accordance with the current Colorado Department of Highways Standards and Specifications M-412-2.
- b) At the time of probationary acceptance inspection, the repair of cracks may be deferred if determined by Arapahoe County not to warrant immediate repairs.
- c) At the time of final acceptance inspection, the repair of all cracks will be completed.
 - 1) Cracks that are less than $\frac{1}{4}$ inch wide, exhibit no horizontal or vertical displacement and do not meet 2) and 3) below, can at the discretion of Arapahoe County, be sealed by routing approximately $\frac{3}{4}$ inch to 1 inch deep by $\frac{1}{4}$ inch wide and filling with Sikaflex 1-A or equal.
 - 2) Any crack from one section through another will require removal and replacement of both sections to beyond the extent of the crack.
 - 3) Any crack that intersects an expansion joint and/or a construction/contraction joint or any other combination will require removal and replacement of sections involved. Saw cuts to minimize removal may be approved by the Arapahoe County Inspection Section.
 - 4) Repair action for hairline cracks as determined in 1) above may be waived at the discretion of Arapahoe County. For the purpose of the above Sections, a hairline crack is one that is reasonably immeasurable and without separation as determined by Arapahoe County.
- e) All construction and contraction joints shall be sealed with rubberized asphalt sealant approved by Arapahoe County. (See Department of Highways Procedure 85-13 Sealant).

CERTIFIED COPY OF ORDER

STATE OF COLORADO)
) ss.
COUNTY OF ARAPAHOE)

At a regular meeting of the Board of County Commissioners for Arapahoe County, Colorado, held at the Administration Building in Littleton, Colorado on Monday, the 18th day of August, A.D. 1986, there were present:

Bob Brooks, Chairman	Present
Thomas R. Eggert, Chairman Pro-Tem	Present
Betty Ann Dittimore, Commissioner	Present
Al Thelen, County Manager	Present
Larry Vana, County Attorney	Present
Marjorie Page, Clerk to the Board	Absent and Excused
Mary A. McCready, Deputy Clerk	Present

When the following proceedings, among others, were had and done to wit:

RESOLUTION NO. 1108-86 It was moved by Commissioner Eggert and duly seconded by Commissioner Dittimore to adopt the following resolution:

WHEREAS, the County Attorney’s Office has received certain proposed Amendments to the Arapahoe County Subdivision Regulations relating to roadway design and construction standards; and

WHEREAS, the Arapahoe County Engineering Department held various workshops/study sessions relating to these amendments relation to the Roadway Design and Construction Standards during the period from May, 1995 to April, 1996, to allow for input from interested persons; and

WHEREAS, the Arapahoe County Planning Commission, on April 17, 1986 did adopt a Resolution of favorable recommendation to the Board of County Commissioners for adoption of the amendments to the Arapahoe County Subdivision Regulations; and

WHEREAS, the Board of County Commissioners of the County of Arapahoe caused to be published in the June 11, 1986 issue of the Independent Newspaper, a complete text of the proposed amendments to the Arapahoe County Subdivision Regulations and the intent to adopt the Arapahoe County Roadway Design and Construction Standards Manual, pursuant to Section 30-28-133 C.R.S., as amended; and

WHEREAS, on July 14, 1986, the Board of County Commissioners held a public hearing on the proposed Arapahoe County Roadway Design and Construction Standards Manual (the “Manual”), dated April 1986 and the proposed amendments to the Arapahoe County Subdivision Regulations, at which time evidence was received and testimony was taken regarding said criteria and amendments; and

WHEREAS, at the conclusion of the hearing, the Board of County Commissioners took the matter under advisement and continued the matter for decision on this date; and

WHEREAS, the Board of County Commissioners has reviewed the testimony and weighed the evidence and has determined that it would be in the best interest of Arapahoe County to amend the Arapahoe County Subdivision Regulations.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of the County of Arapahoe to adopt the Arapahoe County Roadway Design and Construction Standards Manual dated April, 1986, as presented to the Board of County Commissioners on July 11, 1986, as an addendum to the Arapahoe County Subdivision Regulations, subject to the following changes:

- (1) Section 3.1.3. (page 3.1) is amended to read as follows:

3.1.3 The policy and practice of Arapahoe County is to not accept the liability for the facilities designed by others. This means that Arapahoe County does not accept responsibility for the accuracy and adequacy of the design. The County Engineer, through approval of construction plans, indicates the DOHE has reviewed the document and found it in general conformance with the Arapahoe County Subdivision Regulations or approved variances to those regulations.
- (2) Section 3.8 (page 3.5) Required Note 1 is amended to read as follows:

1. The County Engineer stamp and signature affixed to this document indicates the Department of Highways/Engineering has reviewed the document and found it in general conformance with the Arapahoe County Subdivision Regulations or approved variances to those regulations. The County Engineer, through approval of this document, assumes no responsibility, other than stated above, for the completeness and/or accuracy of these documents. The owner and engineer understand that it is the policy and practice of Arapahoe County not to accept the liability for facilities designed by others. The responsibility for the engineering adequacy of the facilities depicted in this document lies solely with the Registered Professional Engineer whose stamp and signature is affixed to this document.
- (3) Section 7.2 (page 7.1) is amended to read as follows:

7.2 Certification of the record drawings is required as follows:

The responsible registered professional engineer for the project shall include a statement, which states “I hereby certify that the public improvements for (name of subdivision or project) have been constructed in substantial compliance with the construction plans approved by Arapahoe County”.
- (4) Section 11.3.3 (page 11.2) is amended to read as follows:

11.3.3. The letter shall include a statement signed by a registered professional engineer in the State of Colorado. “I hereby certify that the public improvements for (name of subdivision or project) have been constructed in substantial compliance with the construction plans approved by Arapahoe County”. The letter containing this certification statement shall be accompanied by independent test verification by a registered professional engineer. Such verification shall consist of acceptable destructive or non-destructive tests and an evaluation report based on those tests which substantiate compliance to the approved plans, and that the expected life of the roadway structure is at least 20 years, based on normal surface maintenance being provided by Arapahoe County.
- (5) Section 11.3.4 (page 11.2) is amended by replacing the word “verify” with the word “certify” in the first sentence.
- (6) Section 3.8 (page 3.6). Required Note 8 is amended by replacing the words “prior to requesting a permit for the construction” with the words “with the permit application” in the first sentence.
- (7) Section 11.3.12 (page 11.3) is amended by the addition of the following sentences at the end of the second paragraph:

The probationary acceptance period will normally be one year. It may be longer under unusual circumstances.
- (8) Section 14.1 (page 14.1) is amended to read as follows:

14.1 GENERAL

Any applicant for the final plat approval (the land subdivider) must provide the DOHE with an itemized cost estimate of public improvements associated with the subdivision (the "Exhibit A). Cost estimates are to establish the amount of collateral provided by the applicant to secure the subdivision improvements agreement. Maintenance costs are not normally an issue in these agreements.

After review and acceptance of the cost estimate by DOHE, it is released to the County Attorney's Office. The County Attorney's Office prepares a subdivision improvement agreement and incorporates the Exhibit A from the approved public improvements cost estimate. This agreement must be signed by the subdivider prior to the Board of County Commissioners hearing scheduled for the final plat approval. Collateral must be provided by the applicant in the amount shown on the Exhibit A unless the subdivider has selected a restriction agreement.

- (9) Section 14.5 (page 14.2) is amended by the addition of the words "or performance bond" after the word "credit" in the first sentence and by the addition of a new sentence (to be inserted after the second sentence) to read as follows:

In some instances, a cash escrow payment may be required for certain improvements.

- (10) Section 11.3.6.3 (page 11.2) is amended by the deletion of the words "with regards to vehicle accidents" and the addition of the words "with regard to such devices".

BE IT FURTHER RESOLVED by the Board of County Commissioners in conjunction with the adoption of the Arapahoe County Roadway Design and Construction Standards Manual, that the following Amendments to be made to the Arapahoe County Subdivision Regulations:

1. Add to Article I, General Provisions, Section 1, Title, the following paragraph:

C. The Subdivision Regulations include the following separate documents, as duly adopted by the Arapahoe County Board of County Commissioners:

1. The Arapahoe County Storm Drainage Design and Technical Criteria, hereinafter the Drainage Criteria.
2. The Arapahoe County Roadway Design and Construction Standards, hereinafter the Design Standards.

2. Add new paragraphs C(4), C(5), and C(6) to Article II, Section 4 Preliminary Plat:

(4) The preliminary plat submittal shall include a traffic impact study, if a valid study for the development is not on file with Arapahoe County. Refer to Guidelines for Traffic Impact Studies (Department of Highways/Engineering Policy 85-3) adopted by Board of County Commissioners Resolution #2297-85, September 25, 1985.

(5) The preliminary plat submittal shall include three copies of a Phase II Drainage Report as defined in Section 2.3 of the Storm Drainage Design and Technical Criteria (See Appendix A, Section 3.0).

(6) If any variances or waivers from the Design Standards or Drainage Criteria are proposed, these must be explicitly described and justified in a letter accompanying the plat submitted.

3. Add new subparagraph C(2)k, to Article II, Section 4 Preliminary Plat:
 - k. The appropriate traffic site triangle shall be designated and dimensioned on the properties at each roadway intersection. A note shall be shown on the plat that prohibits owners of property containing a traffic site triangle from erecting or growing any obstruction over 3'-0" in height within such site triangle areas.

4. Add new subparagraph C(17) to Article II, Section 5 Final Plat:
 - (17) The appropriate traffic site triangle shall be specifically designated and dimension on the properties at each roadway intersection within the plat area. A note shall be included on the plat:

The owner(s) of private property containing a traffic site triangle are prohibited from erecting or growing any obstruction over 3'-0" in height within such triangle, as measured from the highest curb top elevation directly adjacent to the traffic site triangle."

5. Revise paragraph B(2), B(3), B(4), B(5) of Article II, Section 5 Final Plat and add new paragraph B(7) to same section:
 - (2) Two (2) sets of traverse closure calculations corresponding to the final plat legal descriptions.
 - (3) Two (2) sets of the preliminary construction plans for proposed subdivision public improvements including street plan and profile sheets, storm drainage improvement plans, and construction plans for other improvements. These plans are to be prepared in accordance with Chapter 3 of the Roadway Design and Construction Standards (See Appendix A).
 - (4) Three (3) copies of the Phase III Drainage Report as defined in Section 2.4 of the Storm Drainage Design and Technical Criteria (See Appendix A, Section 3.0).
 - (5) Two (2) copies of a preliminary pavement design report prepared in accordance with paragraph 5.1.3 of the Roadway Design and Construction Standards. The applicant may submit a Final Subgrade Investigation and pavement Design Report in lieu of a preliminary report. The final report, if submitted must comply with Section 5.6 of the Design Standards.
 - (7) If any variances or waivers from the Design Standards or Drainage Criteria are proposed, these must be explicitly described and justified in a letter accompanying the plat submittal.

6. Revise Article II, Section 2, paragraph A (11) to read:
 - (11) A cul-de-sac street shall be limited to a length of 600 feet or to a length required for a maximum of 15 single family dwelling units, whichever is greater. The limit of 600 feet shall apply to multi-family residential and no-residential areas.

7. Revise Article III, Section 2, paragraphs B(1), B(2), B(3), B(4), B(6), B(7), B(8), B(9), B(11), B(14) to read:

- (1) All streets in residential subdivisions classified as an R-2, R-3, R-4, R-5, R-P, R-M, or R-D zone, as set forth in the Arapahoe County Zoning Resolution, shall be complete with curb, gutter, sidewalk and pavement. These streets shall be designed and constructed according to criteria and standards set forth in the Roadway Design and Construction Standards.
- (2) All streets in a subdivision, which are classified as R-1, R-E, or R-A by the Arapahoe County Zoning Regulation, shall be constructed with a 28 foot wide paved surface with roadside ditches. Chapter 4 of the Roadway Design and Construction Standards provides details for the rural road cross-sections.
- (3) No new subdivisions shall be approved with gravel surfaced streets, if those streets are to be maintained by Arapahoe County. If the streets remain private, gravel may be used as the driving surface.
- (4) Delete this paragraph
- (6) All streets abutting a subdivision shall be complete with curb, gutters, sidewalks, and pavements, which shall be designed and constructed in accordance with the Roadway Design and Construction Standards. The subdivider shall pay for the improvement costs for twenty-six (26) feet of the street abutting his subdivision in bringing that street to current standards for its classification as adopted in the current Arapahoe County Comprehensive Plans. This is applicable only to streets abutting the proposed development. The subdivider shall also be responsible for offsite roadway improvements identified by the approved traffic impact study as being required or recommended to mitigate traffic impacts of the proposed development. The Board of County Commissioners will decide on the extent of offsite improvements appropriate for any subdivision application.
- (7) Traffic control devices which are required under the Manual on Uniform Traffic Control Devices as published by the U.S. Department of Transportation, Federal Highway Administration, will be installed by the County at the Developer's expense. The County Traffic Engineer will determine the needs and they will be listed along with their cost in the Subdivision Improvements Agreement. Prior to probationary street acceptance, all traffic control device listed in the Subdivision Improvements Agreement will be paid for and installed. The County will furnish and install traffic signs according to the cost schedule published by the Department of Highways/Engineering.
- (8) Subdivision Monumentation – Benchmarks, boundary monuments and range points shall be provided in accordance with Section 3.18 of the Roadway Design and Construction Standards.
- (9) Vertical control shall be established according to Section 3.10 of the Roadway Design and Construction Standards. USGS Datum, 1971 Revision shall be the reference for all subdivision vertical control.
- (10) (NOTE: This paragraph was previously revised by the adoption of the Storm Drainage Design and Technical Criteria, September 23, 1985).
- (11) Street plan and profile requirements are given in Chapter 3 and in Chapter 4 of the Design Standards.
- (12) General Construction Requirements.

- a. Construction of streets and appurtenant improvements shall be in accordance with the Design Standards.

Chapter 4	Roadway Design and Technical Criteria
Chapter 5	Pavement Design and Technical Criteria (including material specifications for structural components)
Chapter 6	Bridge and Major Drainage Structures
Chapter 8	Testing and Inspection Procedures and Construction Guidelines
Chapter 9	Trench, Backfill, Compaction, Testing.
Chapter 10	Permits Requirements
Chapter 11	Acceptance Procedures

- b. No street cut permits will be issued for new utility extensions to new customers after streets have been paved. All utility mains and laterals must be constructed prior to paving or arrangements made with the utility companies involved to install facilities without cutting pavement. Street cut permits will be issued in cases where the utility mains existed prior to development, for maintenance work on existing lines and for reinforcement lines required by growth of the area. In individual cases where water and sewer lines have been incorrectly installed cuts shall be permitted at the discretion of the County Engineer.

- c. The location of curb cuts shall be determined by the approved final development plan (for P.U.D.'s), the approved subdivision development plan (for straight-zoned land), or by an access permit granted by the Department of Highway/Engineering.

- d. Before opening newly constructed roadways for public use, all striping, signs, and barricades depicted on the approved signing and striping plan must be in place. Explicit approval of the Traffic Section, Department of Highways/Engineering, must be obtained prior to opening new roadways for public use.

- e. Subdivider shall dispose of trash and debris resulting from construction of the site in a manner approved by the regulatory authority.

- f. Delete

- (14) All sanitary sewer systems within a subdivision must meet the standards of the Tri-County Health Department.

- 8. Reorganize Article IV, Section I General to read:

ARTICLE IV

IMPROVEMENT REQUIREMENTS

Section 1. General

- A. Prior to approval of the final plat, the Board of County Commissioners will require one or a combination of, the following:
- 1) A subdivision improvements agreement agreeing to construct any required public improvements shown in the final plat documents together with collateral which is sufficient, in the judgment of said Board, to make reasonable provision for the completion of said improvements in accordance with design and time specifications, or:
 - 2) Other agreements or contracts setting forth the plan, method, and parties responsible for the construction of any required public improvements shown in the final plat documents which, in the judgment of said Board, will make reasonable provision for completion of said improvements in accordance with design and time specifications.
- B. As improvements are completed, the subdivider may apply to the Board of County Commissioners for a release of part or all of the collateral deposited with said Board. Upon inspection and approval, the Board shall release said collateral. If the Board determines that any of such improvements are not constructed in substantial compliance with the Regulations, it shall furnish the subdivider a list of specific deficiencies and shall be entitled to withhold collateral sufficient to ensure such substantial compliance. If the Board of County Commissioners determine that the subdivider will not construct any or all of the improvements in accordance with all of the specification, the Board of County Commissioners may withdraw and employ from the deposit of collateral such funds as may be necessary to construct the improvement or improvements in accordance with the specifications.

9. Revise title of Article IV, Section 2 to read:

Time Schedule for Constructing Public Improvements.

10. Revise Article IV, Section 3.

Section 3. Permitting, Inspection, Testing, and Acceptance of Public Improvements.

- A. Permitting requirements for public improvements construction are delineated in Chapter 10 of the Design Standards. These include requirements for construction permits and street cut permits.
- B. Inspection and testing requirements for public improvements construction are delineated in Chapters 6 and 8 of the Design Standards.
- C. Acceptance procedures for transferring maintenance responsibility from the subdivider/developer to Arapahoe County are delineated in Chapter 11 of the Design Standards.

11. Add to Article IV Improvement Requirements.

Section 4. Optional Review and Approval Schedules for Public Improvement Final Construction Plans.

Because circumstances and priorities vary significantly from one subdivision application to another, three options are available to a subdivider for securing Department of Public Works and Development approval of final construction plans for subdivision public improvements.

A. Standard Approval Process

The construction plans submitted with the final plat represent a preliminary design of public improvements. These documents are reviewed primarily to establish the scope of the subdivision improvements agreements and to support the cost estimate and collateral for the agreement. Final construction plans for the public improvements are submitted after Board approval of the final plat, i.e., after right-of-way dedication to the County. The Department of Public Works and Development reviews the plans. When the final construction plans comply with all engineering provisions of the Subdivision Regulations, the County Engineer approves them. The subdivider may then apply for construction permits to build the improvements. This option normally results in construction plan approval from 4-8 weeks after the Board of County Commissioners approval of the plat.

B. Concurrent Approval of Final Construction Plans with Final Plat Approval.

For circumstances in which the subdivider desires to start public improvements construction immediately following Board of County Commissioners approval of the final plat, the following process should be followed:

1. At the first resubmittal of construction plans following the Planning Commission hearing that recommends the proposed subdivision favorably, the applicant should submit a letter indicating his goal of concurrent plat and final construction plan approval.
2. Final construction plans submitted at this time must meet the requirements of Chapter 2 and 3, Design Standards, for completeness of design and material requirements detail. The corresponding Phase III Drainage Report must be in full accord with the County's Drainage Criteria.
3. Final construction plans submitted must be accompanied by the appropriate application form and review and approval fee.
4. Engineering review will proceed as if right-of-way dedications were complete. When the final construction plans meet all the requirements of the Design Standards, the applicant will be notified. If this condition is reached prior to the Board of County Commissioners final plat hearing, the approval of plans (signing by the County Engineer) will be deferred until the final plat is approved by the Board of County Commissioners. If this condition is reached after Board of County Commissioners approve the plat, the plans will be signed at the next scheduled review committee meeting by the County Engineer.

NOTE: The applicant's letter requesting final construction plan approval through this expedited process only guarantees that detailed review by staff will start before Board of County Commissioners approval of the plat. No warranty is given that construction plan approval will be concurrent with final plat approval by the Board of County Commissioners.

C. **Approval of Public Improvement Final Construction Plans Prior to Final Plat Approval**

For circumstances in which subdividers desire to construct public improvements at their own risk prior to the Board of County Commissioners approval of the final plat, several conditions must be met.

1. The land developer initiates the process by submitting a letter stating the desired objective of starting construction of public improvements prior to plat approval. This letter should be submitted to the Director, Department of Public Works and Development, explaining the circumstances and justification for this request.
2. Final construction plans prepared in accordance with the Design Standards and the Phase III Drainage Report, must be submitted at least 8 weeks prior to the expected construction start date. This submittal must be accompanied by the appropriate application form and review/approval fee.
3. The applicant must provide the County a deed or other legal conveyance, granting to the County title to the land which is to become roadway, right-of-way. The Board of County Commissioners must accept title to the land, or reach another equivalent agreement acceptable to the County Attorney, before the County Engineer may approve public improvement construction plans on unplatted land.

This process is not typically used. It is recommended that land developers wishing to build public improvements prior to final plat approval schedule pre-submittal meetings with the County Attorney's office and the County Engineer's Office.

Any final construction plan approvals granted through this process are subject to subsequent revision during the subdivision process. The land developer assumes this risk when constructing prior to subdividing. The County does not imply, assert, or guarantee to the applicant that revisions, additions or deletions of certain public improvements may be required when the land served by the public improvements is eventually subdivided.

12. Add the following section to Article V Variances:

Section VIII. Variance Procedure for provisions of the Roadway Design and Construction Standards:

- A. Requests to waive or vary the requirements of the Design Standards shall be in accordance with Section 3.2 of that document. Requirements and responsibility on the type of timing or writing notice for the Applicant and for the County are specified.

13. Delete all of Article VI, Section 1.0 "Street Classifications" and replace with:

Section 1.0 Engineering criteria for public improvements design, inspection, testing, and material requirements for roadway and appurtenant structures are contained in the Arapahoe County Roadway Design and Construction Standards Manual, a part of the Subdivision Regulations.

14. Delete all of Article VI, Section 2.0 “Street Plan and Profile Requirements” and replace with:

Section 2.0 Submittal requirements and construction plan content requirements are given in Chapters 2 and 3 of the Roadway Design and Construction Standards Manual, a part of the Subdivision Regulations.

15. Delete the entire Article VII “Construction Criteria”, pages 7.1 through 7.52. Replace this with:

Section 1.0 Criteria guidelines, specifications, material requirements, and procedures related to the construction of public improvements within unincorporated Arapahoe County are contained in the Roadway Design and Construction Standards Manual, a part of the Subdivision Regulations.

BE IT FURTHER RESOLVED by the Board of County Commissioners that in conjunction with the adoption of the Arapahoe County Roadway Design and Construction Standards Manual and the related amendments to the Arapahoe County Subdivision Regulations the following conditions shall apply:

- 1) That the design criteria provisions go into effect concurrent with the adoption of the Resolution.
- 2) That the construction material source approval provisions of the Standards (Section 5.5) go into effect December 31, 1986.
- 3) That the requirement for Engineer’s Certification of public improvements construction apply to those projects whose construction plans are approved on or after the approval of this Resolution.

Upon roll call the vote was:

Commissioner Eggert, Yes; Commissioner Dittmore, Yes; Commissioner Brooks, Yes.

The Chairman declared the motion carried and so ordered.

I, Marjorie Page, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid, do hereby certify that the annexed and foregoing Order is truly copied from the Records of the proceedings of the Board of County Commissioners for said Arapahoe County, now in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Littleton, Colorado this 18th day of August 1986.

Marjorie Page, County Clerk
