Build Through Acreages

An Approach to Acreage Development in the Lincoln Jurisdiction

Prepared for the Lincoln/Lancaster County Planning Department
by
RDG Crose Gardner Shukert
in association with
The Schemmer Associates

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RDG

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Cover: Ernest Ochsner, *Early Summer Rain, Hamilton County, Nebraska,* 1997.

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Introduction and Presentation of the Issue

Lincoln's comprehensive plan establishes three development policy tiers for areas within its three-mile extraterritorial jurisdiction, but outside the corporate city limits. Tier I represents areas within the future Urban Service Area, projected to receive sanitary sewer and municipal water services within the 25-year horizon of the comprehensive plan. Tiers II and III include areas that will ultimately receive urban services, but are unlikely to be served in less than 25 years. Tier II lands are projected to receive services within 25 to 50 years, with Tier III representing the city's very long-term growth area.

Long-standing policy in Lincoln has produced a contiguous and compact urban development pattern by requiring that all development receiving urban services must be within the city's corporate limits. Newly developing urban density subdivisions are annexed into the city, allowing them to receive service extensions. However, some large lot development has historically occurred beyond the reach of the city's interceptor sewer system and outside of the city limits. An example of this kind of development has included growth in the Stevens Creek watershed, separated from Lincoln's system by a watershed line. These closer-in acreage developments are now incorporated with Lincoln's Tier I urban service area. The 2025 Lincoln Comprehensive Plan prohibits further acreage development within Tier I, as these areas will be served by urban infrastructure within the 25-year planning horizon of the document.

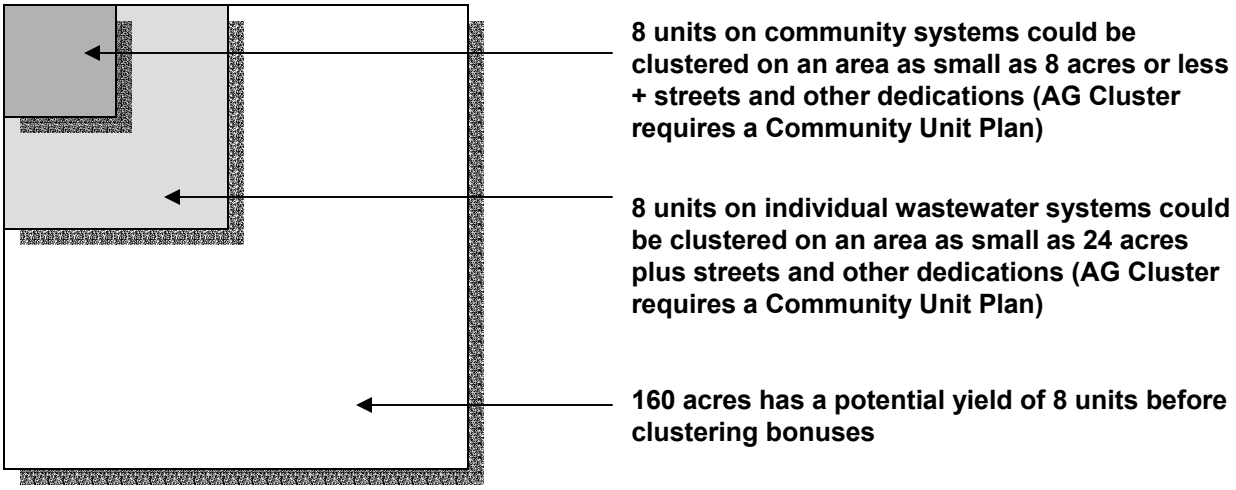
However, Lincoln experiences significant demand for the development of low-density rural development in areas near the city but currently lacking urban infrastructure. Potential owners in large-lot settings are attracted by the privacy and space of living on an acreage homesite, combined with the convenience of relative nearness to a vital and diverse city. Some landowners within these areas are also eager to take advantage of this demand. Sale of property for development provides an expectation of significant profit, while properties near the leading edge of urbanization are increasingly unsuitable for "industrial"

agriculture because of environmental, land use, and operational conflicts. Indeed, the Lincoln Comprehensive Plan recognizes these preferences and assumes that about 6% of the county's population will be accommodated within rural residential developments.

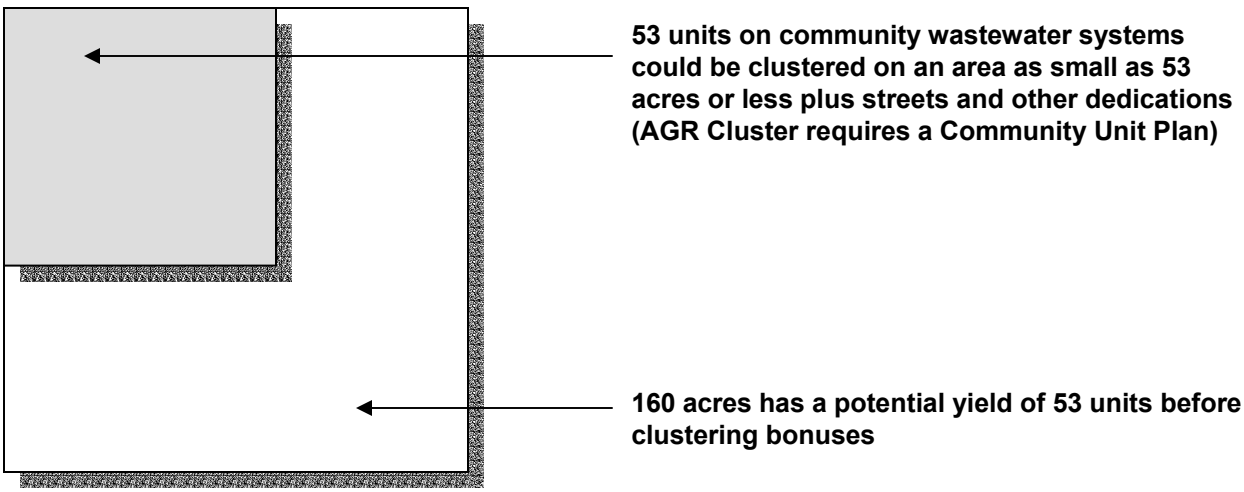
Prior to the adoption of the city's 2025 comprehensive plan, acreage development occurred under the rubric of two zoning districts. The AG Agricultural District permits one unit per 20 acres of lot area, while the AGR Agricultural Residential District permits one unit per three acres. Typical large lot subdivisions utilized the AGR district, and were often designed much like conventional developments with very large lots. Both districts permitted lot clustering to preserve open space through the use of a Community Unit Plan (CUP). The city's CUP regulations provide an additional 20% yield bonus for projects whose clustering preserves significant environmental or open space resources.

In application, an AG Cluster on a 160-acre parcel received a potential yield of 8 units before possible bonuses, but could cluster those 8 units on a smaller portion of the parcel. Similarly, an AGR Cluster on the same parcel received an allowed yield of 43 units (at 0.27 units per acre assuming the use of private roads and not accounting for dedicated public street right-of-ways), which could also be clustered. A 3-acre minimum lot size was required for the use of individual wastewater systems, while subdivisions with smaller lots required the use of community systems. Cardwell Woods, southeast of 27th Street and Denton Road, was an excellent example of an AGR Cluster, designing smaller lots served by a community system to preserve environmentally sensitive areas as common open space. Sunrise Estates, near 84th and O, was a conventional AGR subdivision which presaged another concept – providing outlots and potential easements that in theory would allow the subdivision to convert to higher density at some point.

Increasingly, demand for acreage development focuses attention on Tiers II and III – areas beyond the 25-year urban service area that will nevertheless be provided with urban infrastructure in the long-term future. These areas combine a relatively close-in location with rural character. Yet, urban development will at some point collide with acreage development on individual systems, and most observers recognize that acreage developments on the edge of the city can obstruct logical urban growth patterns. In 1996, the *Lincoln Journal-Star* editorialized:



Permitted Yields on a Quarter Section in AG Zoning



Permitted Yields on a Quarter Section in AGR Zoning

Figure 1:
The Status Quo: Permitted Yields under AG and AGR zoning

> Attractive though smallish acreages are to homeowners, a profusion of three-acre residential properties to the east, south, and southwest threatens to become a major obstruction to orderly and compact growth. Islands of three-acre developments are on the verge of joining together to become continents. . .
>
> As the city limits reach out to touch them, they become expensive territory to cross with roads and sewer and water lines. Either the city has to go through them, inflicting staggering frontage fees without serving very many people, or it has to cover even greater distances to go around them to reach denser development on the other side.

Comprehensive Plan Recommendations

The management and nature of acreage development emerged as a significant issue during the process that led to the adoption of Lincoln's comprehensive plan in 2002. During this process, various points of view emerged regarding large-lot residential development and its role in the urban growth framework. With the definition of three development tiers, some supported fully protecting the city's growth prerogatives by prohibiting acreage developments in all three jurisdictional areas. Others opposed restrictions, while support grew for compromise positions that mandated lot clustering and a "build-through acreage" (BTA) concept. The BTA proposed a transitional subdivision concept – developments would be platted to rural density initially, but would be planned for future transition to urban density with the eventual extension of services. A "ghost plat" would be included that planned for this eventuality, and street and public improvement standards would be enforced that were consistent with ultimate urban standards.

The Lincoln City–Lancaster County Comprehensive Plan formally recommended a build-through concept for development in Tiers II and III. The adopted language recommended a study to implement BTA, and called for design standards to address:

- A preliminary lot layout that accommodates first stage low-density development with rural water and sewer systems. The plat should illustrate future lot splits as a second phase to permit build through of urban infrastructure and eventual urbanization of the subdivision. In theory, property owners would use the income produced by the re-subdivision of their lots to pay for part of the cost of city infrastructure and services.

- A lot layout that meets comprehensive plan requirements.

- A development agreement that waives the right to protest special assessment districts to pay for urban infrastructure and recognizes that interim acreage development is not entitled to extra buffer protection from either existing agricultural uses or future urbanization.

The plan called for two other studies addressing acreage development:

- A "cost of services" study to consider the economic costs and benefits of low-density development.

- A performance standard point system, allowing higher density acreage development in areas that meet specific review criteria for development suitability.

This study to consider the detailing and implementation of the BTA concept includes the following sections:

- A review of national practice in regulation of acreage development in general and application of BTA standards in particular.

- A review of the issues raised by the BTA concept.

- A conceptual framework for acreage development in Tiers II and III.

- Design standards and implementation measures to realize the framework.

Acreage Development: National Experiences

RDG surveyed a sample of approximately 20 cities and counties that are comparable to Lincoln. We defined five approaches to acreage regulation based on this survey:

- Market-Based
- District
- Infrastructure
- Economic Impact
- Transitional Build-Through

The Market-Based Approach. In this approach, the community has no policy to guide acreage versus urban development, and market forces rule. Large-lot

subdivisions are evaluated on the same basis of conventional urban subdivisions, and can effectively locate anywhere within the jurisdiction. Indeed, some county land use plans cluster higher-density acreages around municipalities or their jurisdictional boundaries. This policy runs the risk of surrounding a city with large-lot development using individual water and wastewater systems, obstructing logical extension of urban services. Through 1979, Lincoln followed a variation of this approach, permitting one acre lots in most areas not provided with urban services. Communities in our sample that appear to have minimal special regulation of large-lot development include Ames, Iowa; Oklahoma City and Tulsa, Oklahoma; Springfield, Missouri; and Topeka, Kansas.

The District Approach. This approach designates where acreages are and are not permitted, identifying specific planning policy zones. Typically, acreage development is not permitted in areas that will experience extension of urban services within a reasonable period. Large-lot development is permitted in areas outside these urban development zones. In some cases, an intermediate zone or district provides an "urban reserve," discouraging or preventing rural subdivision in areas that will in the long-term future receive urban services. Zoning provisions for areas slated for future urban density development typically limit densities to 1 dwelling unit per 20 or 40 acres in order to accommodate future provision of infrastructure. Lincoln-Lancaster County currently follows the district approach, with acreages prohibited in Tier I and regulated in Tiers II and III. Other applications of the district approach include Indianapolis, Indiana; Portland, Oregon; and Omaha, Nebraska.

The Infrastructure Approach. This approach requires installation of dry lines, capped and ready to accept municipal sewer and water service when it is extended. This requirement typically applies to areas with higher-density development and/or areas that are likely to receive infrastructure within a specific period of time. Communities that require installation of dry lines include Anne Arundel County and Howard County, Maryland; and Urbana, Illinois.

The Economic Impact Approach. This approach requires connection of lots to urban services when they become available. In this scenario, property owners have the choice of paying the high cost per unit of providing urban services to very large lots, or reducing the cost per unit by further subdividing land to higher densities. The economic impact approach historically occurred in an informal way in many cities, where large acreages on the edge of town were ultimately broken up into smaller lots when urbanization enveloped them. In

theory, the high cost of urban services, coupled with the increasing value of land, encourages the owner to re-subdivide property to both avoid burdensome costs and maximize return. The Lincoln comprehensive plan combines this approach with build-through, relying on the owner's cost of services to low-density development to create conditions that eventually bring about the replatting anticipated by the build-through concept.

Transitional Build-Through. This is the concept espoused by the Lincoln Comprehensive Plan and tested by this study. In this concept, acreage subdivisions are permitted, but are required to submit a shadow or ghost plat that plans for transformation to urban density when utilities are extended. Some jurisdictions in the Midwest, such as Woodbury, Minnesota and St. Croix County, Wisconsin, include general language in their comprehensive plans concerning the consideration of future urban infrastructure extensions in urban reserve areas. However, it is questionable whether such language will yield desirable configurations of rural estates. A few jurisdictions have enacted more explicit policies that address the configuration large-lot development in urban growth areas to allow for future re-subdivision. These include the following:

- *Wichita, Kansas.* Wichita's subdivision ordinance includes a provision concerning "Lot Bundling." During the preliminary plat process:

  > The Applicant shall submit a restrictive covenant tying the lots together and limiting each building site to one dwelling unit until the property is annexed by the City of Wichita and municipal water and sanitary sewer services become available. The covenant shall also restrict the location of structures on this plat to avoid interference with the possible future streets and setbacks and limit future development until submittal of a paving petition.

  In the event a rural plat is located within an area where public services are planned for higher density development (within the 2010 or 2030 urban growth boundaries), lot bundling is used so that the building sites may be readily converted to urban-scale lots without replatting. The plat must include the eventual lots and contains contingent street dedications to facilitate subdivision into smaller lots in the future.

  The applicant must plat the lots so they may be converted to urban building sites (20,000 square feet maximum). Contingent street dedications are platted along with a restrictive covenant tying the lots together and limiting each building site to one dwelling unit until the property is annexed, municipal water and sanitary sewer services become

available, and a paving petition is submitted. The covenant also restricts the location of structures on this plat to avoid interference with the possible future streets, easements and setbacks.

Each building site must meet the minimum requirements for on-site sewage facilities (2 acres for septic systems, 4.5 acres for sewage lagoons). The Lot Bundling concept indicating the current building sites (combination of lots) must be indicated in a separate drawing on the plat and also recorded. A drainage plan for the lots must also be prepared.

- *City of St. Cloud, Minnesota.* St. Cloud's subdivision ordinance states that:

> Any residentially zoned lot (excluding Rural Residence zoning) that is larger than one-half acre or has a street frontage in excess of 150 feet that is intended to be initially served by a private septic system must include a proposed ghost plat (a sketch plan of a subdivision of lots and public right-of-ways depicted with a dashed or other distinguishing line format) within the preliminary plat for the lot that depicts future subdivision of the property facilitated by the extension of municipal utility services.

Building sites must be large enough to accommodate septic systems.

- *Scott County, Minnesota.* Scott County requires a build-out plan, or "ghost plat," in its Rural Residential Reserve and Urban Expansion districts when a parcel of land is subdivided and the subdivision plat shows one or more lots that may be eventually re-subdivided into smaller lots, as well as when cluster subdivisions reserve open space for future development.

The Rural Residential Reserve area is intended to be reserved for future higher density development at a time when infrastructure is available. The density requirement for standard subdivisions in this area is one unit per 10 acres gross density. It is anticipated that the Urban Growth Expansion area will be developed with higher density development and served by municipal infrastructure by 2040. Density requirements for standard subdivisions in this area must be 1 unit per 40 acres, while 1 unit per 10 acres is allowed in cluster subdivisions if 70% of the land may be preserved for future development.

The ghost plat must illustrate:

1. Lot design consistent with the long range planning for the area (Comprehensive Plan).

2. The layout of future streets. Local streets shall be planned to provide street connections to adjoining parcels, neighborhoods, or future development open spaces as a means of discouraging the reliance on County and State roads for local trips.

3. Easement locations for utilities and storm water drainage.

4. Locations of buildings or structures on the lots to accommodate future subdivision.

5. Within the Urban Expansion District, the build out plan may be required to provide information demonstrating how public utilities may be extended to the subdivision to accommodate future urban development.

In cluster subdivisions, deed covenants are required with the subdivision disclosing that the open space is intended for future development.

Evaluation of Approaches

The following discussion evaluates each of these five regulatory approaches for their application to Lincoln's comprehensive plan objectives.

Market-Based Approach

The *market-based* approach would represent a retreat from Lincoln's proven growth management programs and, within Tiers II and III, a return to an "acreages anywhere" approach that has not applied in Lincoln since the 1970s. The city currently prohibits acreage development within Tier One, the city's projected 25-year urban service area. This prohibition should not change, even with adoption of a market-based approach in Tiers II and III. However, the likely outcome of this approach, given the preferences of at least a significant share of the Lincoln metropolitan market, would be substantial acreage development in these outer urban tiers. This would severely complicate future extension of urban services beyond the 25-year plan horizon, and make it very difficult for the city to achieve projected urban densities in these long term development zones.

District Approach

Applying the *district* approach would require revisiting Lincoln's recently adopted comprehensive plan and identifying those areas within Tiers II and III that are unlikely to receive urban services at any time in the future. Acreage development would be permitted within these districts, while acreages would not be permitted in areas that would eventually have urban infrastructure. This policy would essentially amend Tier I to include all parts of the Lincoln jurisdiction that would ultimately receive urban water and wastewater services, based on a long-term urban infrastructure plan; acreage development would be permitted in the remaining parts of the current Tiers II and III. Alternatively, all of Tiers II and III could be defined as future urban services areas, prohibiting acreage development within the Lincoln planning jurisdiction. The community participation process that we conducted as part of this study indicated significant support for the district policy.

Applying the district approach does present challenges. To implement the concept, the city must prepare a detailed long-term infrastructure plan, to define those areas that would ultimately receive services. Within Tier II and III parcels defined as being within future urban service areas, property owners would experience significant restrictions on the types of development permitted on their property. Within these relatively close-in areas, often close to pre-existing residential development, full agricultural use, with its substantial environmental and operational effects, can face vocal opposition. On the other hand, owners would not be able to develop their property for other (primarily residential) purposes solely because utilities may be extended in more than 25 years. The district policy may, conversely, be overly permissive. If the long-term urban service area boundaries are narrowly drawn, large areas of the two outer tiers may be open to acreages. Depending on market demands and preferences, this could cause acreage development to exceed the 6% component envisioned by the comprehensive plan.

In order to avoid these problems, the 2025 comprehensive plan proposed the build-through concept – a technique that could accommodate the development objectives of close-in rural property owners to at least some degree, while avoiding serious obstacles to Lincoln's sound urban development.

Infrastructure Approach

The *infrastructure* approach requires new acreage developments to install urban infrastructure, even though those facilities may not be used for a number of years. Because sewer and water lines tend to deteriorate over a long period without threshold flows, this policy is most applicable to areas that will receive services within a near- to mid-term future – Tier I in Lincoln's growth framework. Yet the city's current adopted policy of prohibiting acreages in this tier is clearly a more powerful and efficient way of preserving the city's urban growth prerogatives.

Applying the infrastructure approach to development in Tiers II and III requires a substantial investment in utilities that will not be used for many years, because trunk line extensions will not take place for 25 or more years. The inevitable deterioration of these unused or underused lines over time is likely to require their replacement or rehabilitation at the time that urban services are actually extended. An exception would be developments that utilize community wastewater and water systems, involving the construction of local service sewer and water distribution lines. These continuously used lines would require replacement only if they were developed below normal city standards.

Economic Impact Approach

The *economic impact* approach is based on creating powerful incentives for re-subdividing lots to avoid very high assessments on low-density lots, or to realize the financial yields of taking advantage of higher density development. In a way, this is a historically-proven technique, and its results are observable in cities such as Lincoln and Omaha. In both cities, districts or acreages that were once developed to very low density on the edge of town re-subdivided over time as urban development enveloped them. The economic impact model harnesses natural market forces to change the personality of onetime low-density estates to an urban pattern.

However, this approach is at best an inexact procedure. Some owners may choose to bear the costs, and, through opposition to replats or rezonings, prevent their neighbors from converting their land to urban density. In addition, elected officials may well conclude that high assessments on large lots are onerous, thereby forgiving or reducing assessments. The effect of these political decisions

could potentially require all taxpayers to subsidize the costs of urban infrastructure extensions. For the impact approach to work effectively, discretionary actions that could warp the workings of normal economic forces by creating subsidies should be minimized.

Transitional Build-Through Approach

The attraction of the *transitional build-through* approach is its ability to manage the process of converting from rural to urban densities brought about by the economic incentives of minimizing costs and maximizing profit envisioned by the impact approach. However, the concept also faces a number of difficult obstacles, resulting in the fact that it has not been fully implemented in any community that we surveyed. While ghost plats are sometimes required, no device has been developed that actually triggers the density transition. In several situations, the concept remains as comprehensive plan language that has never been implemented by ordinances or regulations.

Major problems that can block realization of transitional build through include:

- *Design challenges.* The standards for large-lot and urban subdivisions are sometimes incompatible. For example, a rural street section using surface drainage and an urban section with curbs and gutters have significant design differences. When a subdivision developed to rural standards transitions to full urban density, the streets may require complete reconstruction. Similarly, installation of sewer and water lines after the fact can cause significant disruption and cost. These design and engineering challenges, while significant, can nevertheless be solved.

  A related question relates to the standards employed for streets and utilities within pre-transition low-density developments. Urban street standards, including curb and gutter, are usually not appropriate for acreage developments that lack storm sewers. On the other hand, rural standards permitting gravel paving, may also not be appropriate for these pre-urban transitional developments. When community water and wastewater systems are employed, the use of utility lines typical of rural subdivision but below normal city standards will require costly replacement when utilities are extended and annexation takes place.

- *Social and lifestyle preferences.* People who have chosen to live on acreage sites have done so because of a desire for lower-density living. Many will not be

pleased to give up these preferences for urban subdivision living. As a result, actual transition may well confront significant resistance, and owners who choose to re-subdivide could well face litigation from upset neighbors. Some experts in the development field believe that density transitions are more likely to be incremental: from three acre to one acre lots, or from one acre to one-half acre lots, but are unlikely to jump from acreages directly to urban densities.

- *Legal obstacles.* Jusisdictions that have implemented the build-through concept do not have legal obligations or title arrangements that trigger urbanization. One concept is restricting fee title to a portion of a lot. For example, the nominal owner of a three acre lot only has clear title to ½ acre of the site; the balance is leased for a period that expires when urban services are extended. However, this arrangement can be difficult, especially when extended over a long period of time, and through changes in ownership. In Wichita, deed restrictions in the bundled lot concept restrict placement of structures on the lot to permit future urban development, but do not appear to compel the sale of portions of the site.

- *Political realities.* Given substantial opposition and resistance, elected officials may be unlikely to grant approvals needed to bring about transitions, or to require connections or high assessments on acreage properties. In fact, these approvals would require remarkable discipline on the part of officials who were probably not involved in formulating the initial policy.

Lessons Learned and Criteria for a New Policy

The foregoing evaluation of the five approaches to acreage regulation help us define the criteria for a new policy for Lincoln. We conclude that:

- A return to a market-based "acreage anywhere" policy in Tiers II and III is not acceptable to the community and retreats from the city's long-standing policies to grow gradually and contiguously as a unified community.

- Application of a district approach would require a re-opening of the comprehensive plan process to determine specifically which Tier II and Tier III areas would permit acreage development. The result could create a "binary" solution that could restrict potential development rights of property owners in long-term urban service areas, while opening an overly large supply of land within those areas that are unlikely to receive future services.

This, in turn, could produce potential economic inequities that could cause property owners to dispute over which side of the urban services line they were located on.

- Installation of capital urban infrastructure in areas where lines will not be used for 25 years or longer is unnecessary. These improvements are likely to need replacement or major repair before they are actually used. On the other hand, when utility lines will be used during the interim period, they should be built to city standards.

- The economic impact model creates significant natural incentives for eventual transitions from rural to urban density. However, discretionary actions that could block these processes, including public subsidies for retaining low densities and lawsuits that bring countervailing penalties into play, should be avoided.

- The transitional build-through concept can help manage the process of density transition by planning for it in advance. However, build-through should:

    - Establish infrastructure standards appropriate for close-in, low-density development that expedite eventual conversion to urban standards.

    - Formalize and agree to an understanding of the future urban use of the property.

    - Manage the supply of land available for interim rural density development.

    - Plan for the framework systems necessary to support the ultimate urban development and annexation of the parcel.

The Build Through Acreage (BTA) Concept for Lincoln

A proposed BTA concept for Lincoln that responds to the city's objectives and to the lessons of other approaches by:

- Permitting interim acreage development on a specific portion of parcels within Tiers II and III, located on the portion of the site most appropriate to low-density development.

- Requiring a build-through concept on the acreage portion of the site that allows an incremental step-up in residential density.

- Reserving much of the parcel as an outlot for future urban development, and pre-planning the urban framework necessary to support that development.

- Establishing the agreements at the front-end of the process that clearly state the eventual long-term future of the parcel.

This BTA borrows from the conservation or cluster subdivision technique currently used in acreage development in the Lincoln jurisdiction, permitting initial development on a portion of a large site while retaining the majority of the site as open space. However, while open space in a conservation development is typically maintained as common ground, the BTA concept reserves it for eventual urban development. In acreage clusters, Scott County, Minnesota uses a similar concept, requiring a deed covenant that discloses that open space may be reserved for future urban development to notify acreage owners.

General elements of the BTA concept include the following:

- A portion of the development site is platted into acreage lots. The balance is maintained as an outlot, developed only when urban services are extended.

- A transitional (or ghost) plat is required on the acreage portion of the parcel that establishes, among other requirements, future lot lines, building envelopes, right-of-way dedications, and easements. The transitional plat includes minimum transitional lot sizes that permit an incremental step-up in residential density. This reduces opposition to eventual urban conversion by permitting transitional subdivisions to maintain their basic development pattern.

- City policy and ordinances establish general residential development objectives for the entire site, including both the acreage and outlot portions. The balance of the site must be developed in a way that achieves these general objectives.

- An urban framework master plan is adopted for the entire development parcel at the time that the plat for the acreage portion is approved. This master plan provides for features of the urban framework, including streets,

utilities, open spaces, and greenways that are necessary to both support the eventual development of the subject parcel and provide the linkages that coordinate this and neighboring developments.

- The acreage portion of the development is located according to specific criteria, in a portion of the site most suitable for acreages in its context.

- Public improvements in the acreage cluster follow intermediate design standards that are appropriate for the initial development and promote the economic transition to urban development upon future annexation and utility extension.

Details and Standards

The following presents the specific details of the BTA concept.

Zoning Policy

All areas currently zoned as AG or AGR that are not currently platted would be required to meet BTA requirements. Any new residential subdivision development in Tiers II and III must be consistent with the BTA concept and be developed as Community Unit Plans (CUPs). No new AGR zoning, providing a potential density of up to one unit per three acres, will be permitted in the Lincoln jurisdiction outside of areas previously designated for low-density residential in the comprehensive plan, or those with a very high score in the city's performance rating system for rural development. Instead, the BTA standards and requirements contained in this plan would replace current AG and AGR standards for rural residential development.

Parcels within the Lincoln planning jurisdiction that are currently zoned AGR but have not been platted would retain their right to the residential yield permitted by their current zoning (the equivalent of one unit per three acres). However, subdivisions on these parcels will be required to meet the other standards established by the BTA concept. These include submission of a transitional plat providing maximum lot sizes as presented in Table 2, compliance with all street and infrastructure standards, and subdivision agreement provisions set forth by these standards.

AGR zoning may continue to be applied to lands currently designated for low-density residential development by the city's comprehensive plan, or those

receiving a very high score under the city's performance rating system for rural development. However, this new AGR development may be subject to performance or build-through standards.

Minimum Parcel Size

All new residential subdivisions in Tiers II and III must be developed according to the BTA requirements. The minimum parcel size for any new residential development is 40 acres in either Tier II or Tier III. Of the parcel:

- A maximum of 20% of the area may be used for the acreage component if the acreage component uses individual wastewater systems with an initial minimum lot size of 3 acres per unit.

- A maximum of 10% of the area may be used for the acreage component if that component uses a community wastewater system at a maximum initial gross density of 1 unit per acre.

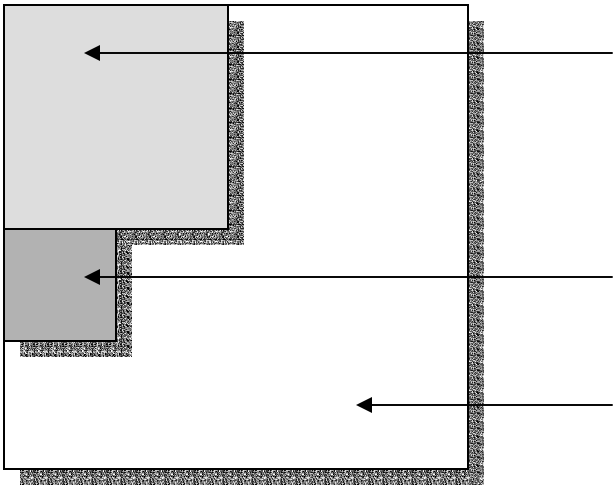
- An additional 5% of the area of the parcel may be used for acreage development if the CUP provides for permanent preservation of a significant environmental or open space resource, including but not limited to wetlands, significant stands of trees, or special wildlife habitats. Extension of this bonus provision is at the discretion of the City of Lincoln through the plat and CUP approval process.

The balance of the site must be reserved as a platted outlot and reserved for future urban development. This outlot may not be developed until urban services are available.

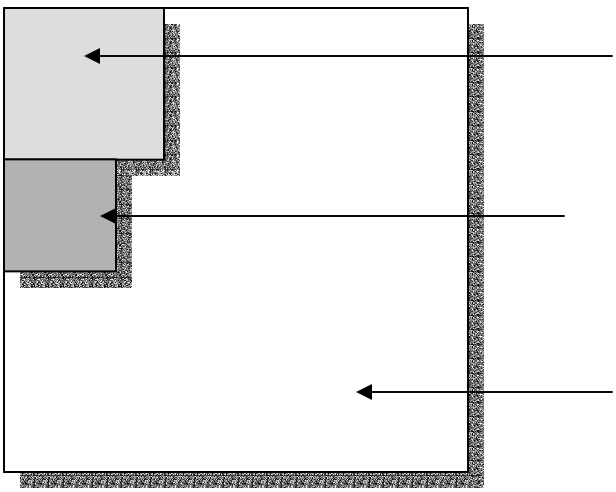
BTA standards do not apply to the following situations:

- Parcelizations or subdivisions that follow existing AG standards, with a minimum lot size of 20 acres. These large lots typically do not obstruct future subdivision or development at higher densities. Thus, a 160-acre parcel may be subdivided into 8 lots with 20 acres each without applying BTA standards.

- The current zoning provision that permits creation of one three-acre lot out of a parcel that contains 40 acres to accommodate a farmstead would be retained, provided that the development on the balance of the site does not exceed the one unit per 20 acre standard. Thus, a site as small as 23 acres



BTA Development on Individual Systems



BTA Development on Community Systems

Figure 2:
Build-Through Acreages: Site Area Permitted for Acreage Development

with a qualifying pre-existing farmstead can accommodate two units, one of at least three acres including the farmstead and the other including the remainder of the parcel.

- Sites zoned AG below the 40-acre minimum threshold for subdivision development would accommodate one unit, consistent with the provisions of the underlying AG zoning, permitting one unit per 20 acres; or two units under the farmstead scenario.

Sites below the 40-acre minimum threshold and currently zoned AGR would retain their right to subdivide at a yield of one unit per three acres, but must meet BTA requirements.

Note: The percentage of a parcel that may be placed in acreage development is established partially by overall plan objectives to control the quantity of acreage development in the jurisdiction and partially by transportation constraints. Prior to urbanization, these developments will typically be served by section line roads which may be paved either to rural standards or may be unpaved. Based on a quarter-section development pattern on either side of the section-line road, one mile of road may serve up to 76 units, with density and bonus provisions set forth in Table 3 below. Assuming that each unit generates 10 to 12 vehicle trips per day, development along each mile of road generates between 760 and 912 vehicles per day (vpd). Development to significantly higher densities could require subsequent and premature improvement of these section line roads at substantial cost.

General Density Objectives

Ultimately, urban density development is envisioned for land within Tiers II and III. While it is impossible to provide a detailed land plan for an urban outlot that will not develop for 25 years or more, agreements should recognize general development objectives for the outlot. This assures that present and future homeowners in the acreage component of the development are aware that the balance of the land will be subject to future urban growth. We suggest that the language of subdivision agreements and deed restrictions clearly state that future development of the outlot will:

- Accommodate a variety of urban uses provided with city sewer and water service.

- Have overall residential densities that range from 5 to 50 units per acre, consistent with the density objectives of the comprehensive plan.

- Allow for other urban uses, including schools, parks, churches, apartments, and other civic and supporting facilities.

Table 1 indicates a future development scenario on an outlot that achieves this minimum density. This "density floor" is based on a potential housing mix of 60% single-family detached development, 20% medium-density or attached housing, and 20% multi-family housing, distributed over 100 units.

Table 1
Projected Density Mix for Urban Portion of Build-Through Development

Type	Number of Units/100	Typical Gross Density	Acreage Requirement
Single-Family Detached	60	4 du/A	15.00
Medium Density Attached	20	6 du/A	3.33
Multi-Family	20	12 du/A	1.67
Total	100	4 du/A	20.00

Density Requirements and Transitional Plats in the Acreage Portion

In the build-through concept, the acreage portion of the parcel will include both initial and transitional plats. The initial plat provides for the subdivision of land with the specific final plat approval, while the transitional plat (or ghost plat) provides for the ultimate subdivision of the acreage site with the extension of urban services and subsequent annexation.

Two types of initial subdivisions may be proposed – subdivisions using individual wastewater systems such as septic systems and subdivisions utilizing community wastewater systems. Subdivisions on individual systems must maintain a minimum lot size of 3 acres, while subdivisions on community systems are permitted a maximum gross density of one unit per acre.

The transitional plat displays the ultimate lot subdivision following extension of urban services. Individual properties in the acreage area must connect to services when they are available. While an individual owner may pay the very high cost of these mandatory connections, they also may re-subdivide according to the transitional plat, or a subsequent approved replat. The transitional plat provides for an incremental step-up in density. The transitional plat for a subdivision initially developed on individual systems at a minimum lot size of

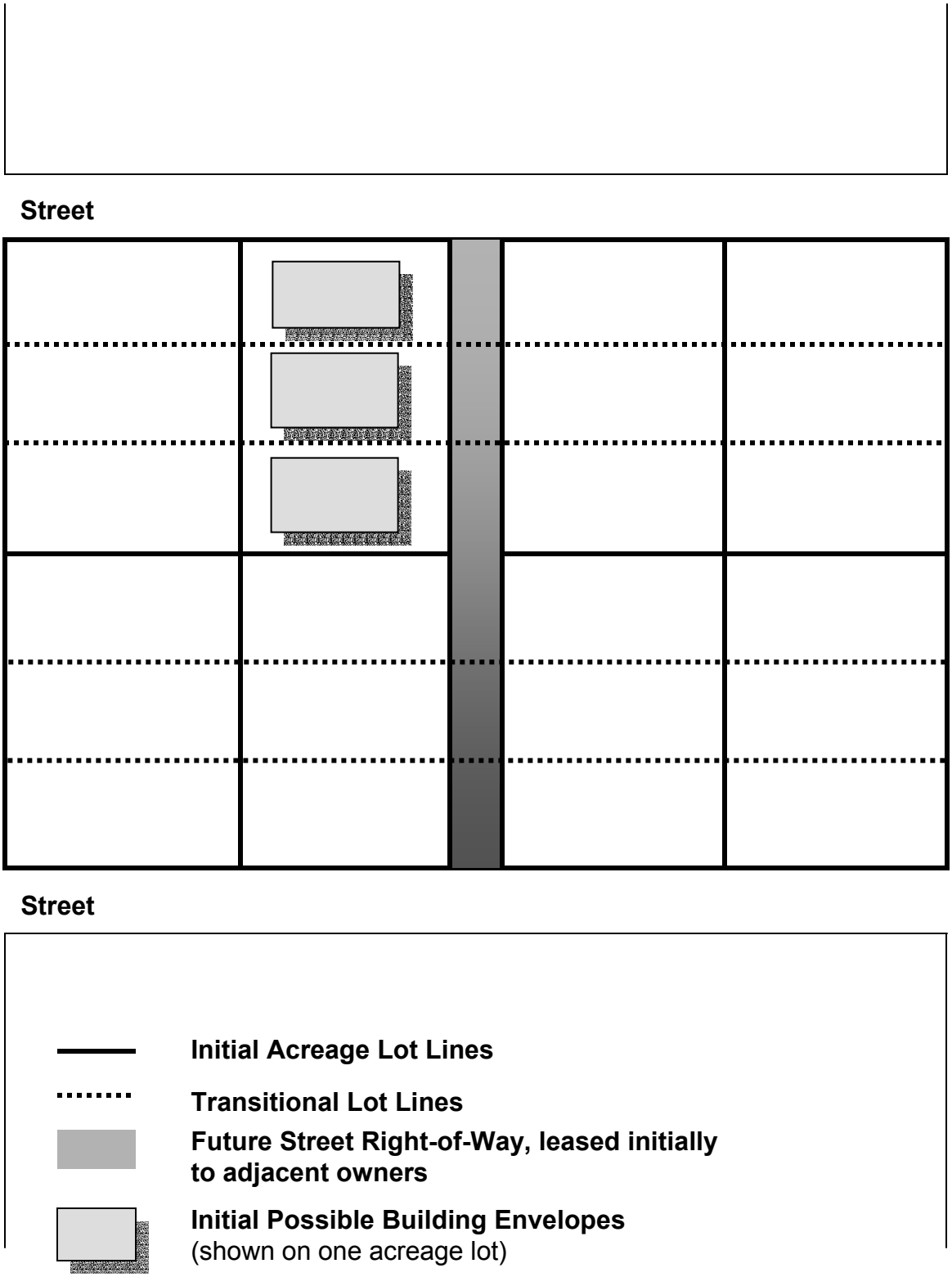


Figure 3a:
Transitional Subdivision Scenario: 8 lots to 24 lots

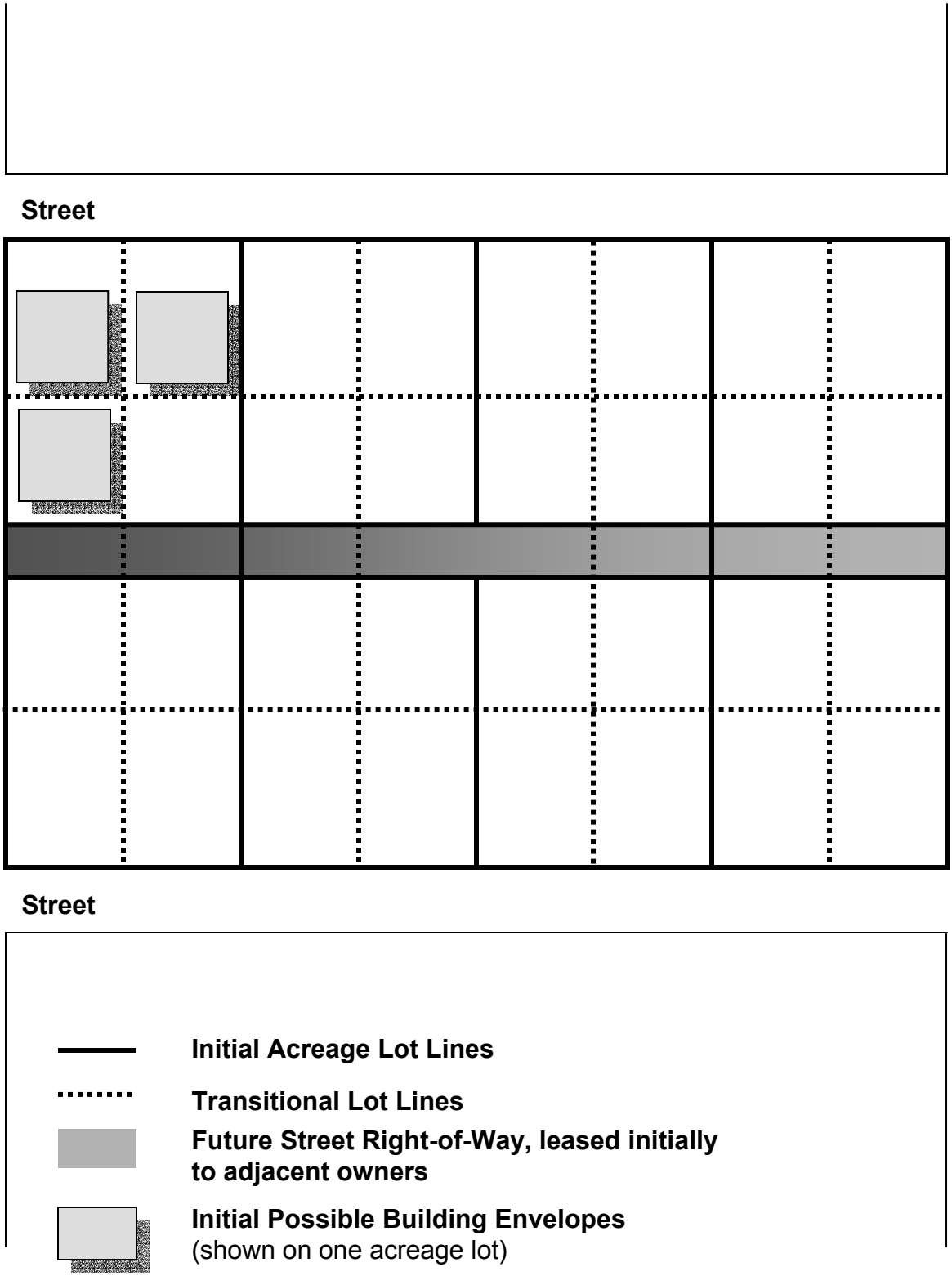


Figure 3b:
Transitional Subdivision Scenario: 8 lots to 32 lots

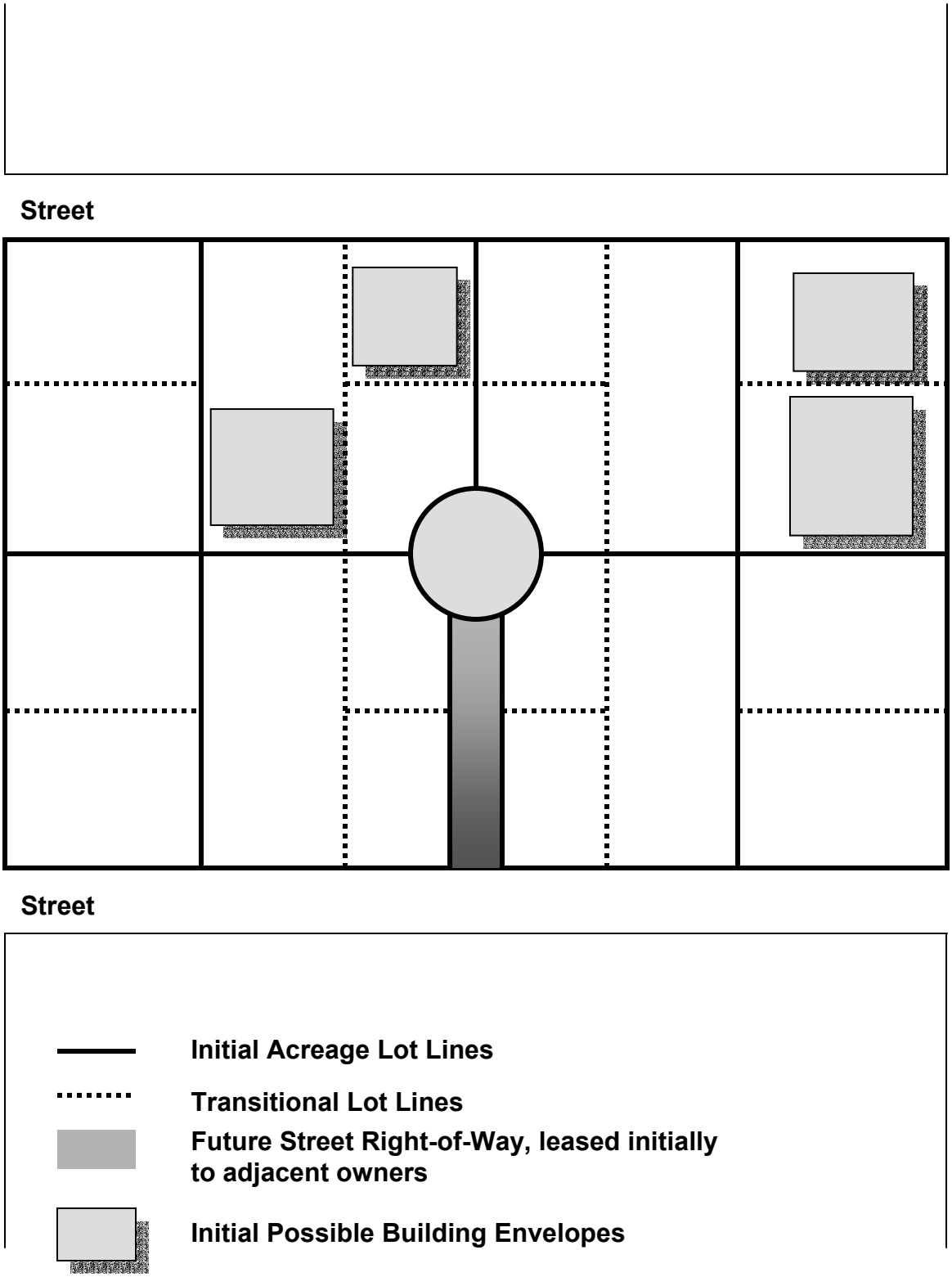


Figure 3c:
Transitional Subdivision Scenario: 8 lots to 20 lots

three acres must indicate a maximum average lot size of one acre. The transitional plat for a subdivision initially developed at a maximum gross density of 1 unit per acre must indicate a maximum average lot size of 10,000 square feet. Transitional plats may provide for higher densities than those generated by these maximum averages.

Table 2 below displays the initial and transitional lot sizes and yields for each type of subdivision:

Table 2
Initial and Transitional Lot Sizes, Densities, and Yields for BTA Developments

Type	% of Parcel Available for Acreage	Initial Plat Minimum Lot Size or Maximum Density	Lot Yield per 160 Acre Parcel (without bonuses)	Transitional Plat Maximum Average Lot Size (or Minimum Density)	Lot Yield per 160 Acre Parcel (without bonuses)
Individual Wastewater Systems	20%	3 acre minimum lot size	10	1 acre (1 unit/acre)	32
Community Wastewater Systems	10%	1 unit per acre maximum density	16	10,000 square feet (3.25 du/A)	52

Note: This restriction is designed to prevent a pattern of urban density subdivisions in Tiers II and III on community systems. Assuming that public right-of-way, storm drainage facilities, and other public land comprises 20% of the site area of the development, a minimum lot size of 3 acres generates an average gross density of about 0.28 units/acre, or 1 unit per 3.64 acres. For developments on community systems, a gross density of 1 unit per acre produces a typical lot size of 0.80 acres. Design solutions are possible that reduce public, non-assignable lands below the 20% average.

Comparisons to Existing Yields

Table 3 below compares current residential yields per quarter section (160 acres) for AG and AGR clusters with initial yields proposed under the build-through provisions. This indicates that the build-through concept as proposed provides somewhat better yields than currently permitted under AG cluster provisions, and substantially better yields for projects that utilize community systems. On

the other hand, AGR developments provide far more intensive development on property than allowed by either AG Clusters of the BTA concept.

Table 3
Typical Comparative Residential Yields per Quarter Section: AG, AGR, and Proposed BTA Development

Subdivision Type	AG		AGR		BTA	
	Normal	Bonus	Normal	Bonus	Normal	Bonus
Individual Systems	8	10	43*	NA	10	13
Community Systems	8	10	43*	51	16	24

Note: Assumes a minimum lot size of 3 acres for individual wastewater systems and a 20% allocation of site area for streets and other public rights-of-way.

** Assumes calculation based on city permitted density in AGR of 0.27 units/acre. In the Lancaster County jurisdiction, the permitted density of three acres per unit produces a potential yield of 53 units.*

Location of Acreage Development

The location of the acreage development on the overall development parcel will vary with site context, but should be located according to specific criteria. The CUP application should present criteria justifying the location of the acreage portion of the development, in respect to an overall parcel master plan. Locations for the acreage portion of the development may include, but not be limited to:

- The part of the larger parcel most distant from or most difficult to serve with future sanitary sewer or other urban services, as defined by the parcel master plan.

- Ridgelines and high points on the site. Sewer service will generally be provided through the lower parts and valleys of the site. Also, higher density housing typically generates more urban run off; locating acreage development uphill may reduce the amount of runoff carried over long distances by conduits.

- Areas on the site which might be environmentally unsuitable for urban density development, including slopes or wooded areas. Major environmental resources, such as wetlands, may be bundled into the acreage portion of the site. Preservation of these areas may result in the application of bonus provisions, permitting a larger portion of the overall parcel to be placed in acreage development.

- Areas that have soil conditions or types most suitable to septic systems or for installation of community systems such as constructed wetlands.

- Areas located away from future major streets or collectors, or separated from the major circulation network for the overall development.

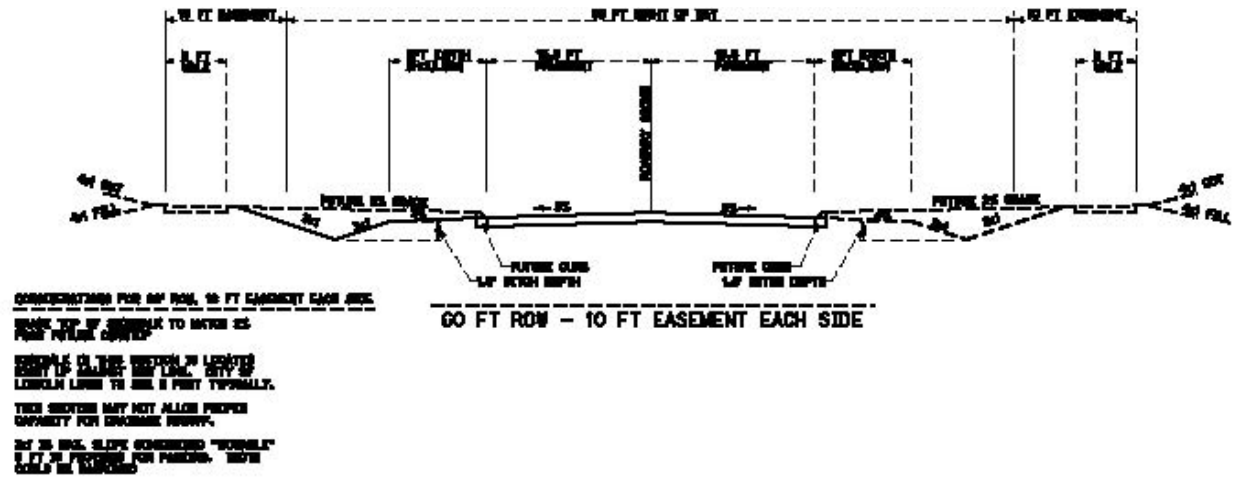
Design Standards

Street Standards

The acreage portion of the development should utilize street standards that are appropriate to low-density development but expedite eventual conversion to urban standards. These overall standards include:

- *A combination of a permanent right-of-way dedication and adjacent drainage easements.* In the initial acreage subdivision, stormwater drainage will be provided by surface drainage from the road and adjacent drainage ditches or swales. With the eventual extension of urban services and annexation by the city, this section is likely to convert to curb and gutters with storm sewers, although flexibility should be maintained for alternative drainage systems. The initial plat should provide adequate space through dedications and easements for drainage swale development, typically requiring more than the 60-foot urban street dedication that is required by Lincoln's subdivision regulations. The conversion to urban standards will ultimately narrow required right-of-way to the 60-foot standard. Therefore, we recommend a 60-foot permanent dedication with a 20-foot easement, typically 10 feet to a side. With urban conversion, this easement will be vacated.

- *A requirement that all streets be paved, but permitting paving to current rural standards.* Paving should be required for any acreage development within the city's planning jurisdiction. County standards permit paving with 6 inches of asphalt (compared with city standards of 6 inches of concrete or 2.5 inches of asphalt overlaid on a 5 inch concrete base). While it is logical to require



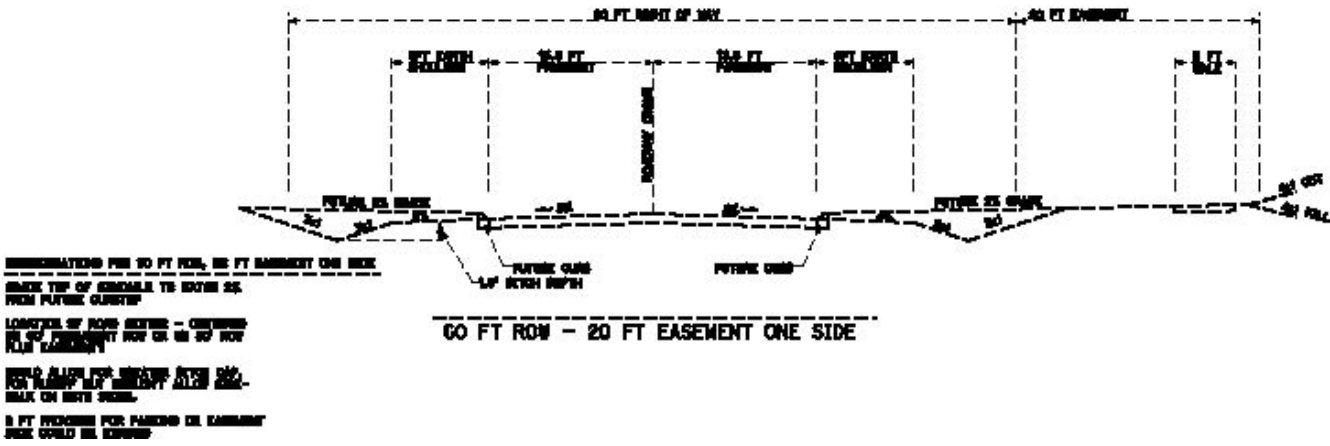


Figure 4:
Suggested Intermediate Street Suggestions

paving in Tier II and III acreage subdivisions to meet current city standards, the probability is that these local streets will be in service for at least 25 years before annexation. At that time, they will have degraded to the extent that they will need major rehabilitation or reconstruction in any case. Use of rural standard paving with the initial plat will avoid unnecessary expense, and, because of their wear characteristics at the time of annexation, will encourage upgrade to city standards.

- *An intermediate street profile that encourages future urban conversion.* Typically, rural section streets include a high center to create a more positive drainage pattern to adjacent ditches, while the crowning profile is lower for urban streets draining to curbs and gutters. Standards for initial BTA plats provide for an intermediate profile, with a center that is elevated, but to a lesser degree than typical with an urban section. This will ease the transition with annexation.

- *A 27-foot roadway width, sufficient to accommodate pedestrians. Sidewalks on one side of the street may be developed, but are not required.* City subdivisions require concrete sidewalks on both sides of a street, while rural subdivisions typically do not require sidewalks. Because of the intermediate character of acreage development in Tiers II and III, some pedestrian accommodations should be provided. However, given the interim nature of streets within BTA subdivisions, a sidewalk location on the private side of the drainage swale could complicate eventual conversion to an eventual urban right-of-way. Therefore, pedestrians may be accommodated on a road surface with wider than normal lanes. If sidewalks are provided, a variety of paving surfaces are permitted, provided that the final result meets ADA accessibility standards. Permitted materials include granulated stone, asphalt, and concrete. If granulated stone is used, erodible areas should be paved to avoid gullying that can inhibit pedestrian access.

These intermediate street standards are summarized in Table 4 below and illustrated in Figure 4.

Table 4
Intermediate Street Standards for Initial Subdivisions in BTA Developments

	Intermediate Acreage Component	**Urban**
Right-of-way width	60 foot dedication with 20 foot easements. Depending on street design and profile, easement may be divided into both sides of the street or located entirely on one side. The easement will ordinarily be vacated at time of annexation and conversion of the street to urban standards.	60
Paving requirement	6 inch asphalt or concrete.	6 inch concrete or 5 inch concrete with 2.5 inch asphalt topping
Street channel width	27	27
Edge condition	Rural section with ditches	Curb and gutter
Sidewalks and Sidewalk Materials	Pedestrians are accommodated by wider than normal rural road surfaces. If sidewalks are provided, they must meet ADA accessibility standards. Permitted materials include granulated stone, asphalt, or concrete. All erodible surfaces must be paved.	Two sides with 4-foot minimum clear width. Concrete required. All sidewalks must meet ADA accessibility standards.
Drainage	Surface drainage with ditches	Surface drainage with curb and gutters, leading to storm sewer system.
Cross Section	Centerline is lower than normal rural crown; Elevation should permit future filling of swale and construction of curb and gutter	Normal urban section
Street Lighting	Not required of initial plat	Lighting to LES Standard

Note: Right-of-way width plus easements for intermediate street must be adequate to accommodate swales on both sides.

The subdivision agreement should include language that waives the right to protest assessments that would convert the intermediate section to an urban section upon annexation at the city's discretion. This provision might also provide for the vacation of excess right-of-way dedicated for drainage swales back to the adjacent owners.

Sanitary Sewers

Community Systems

For projects using community wastewater systems, all sewers must be built to city urban standards. This provides for 8-inch lines with manholes. The sewer system is designed to provide gravity flow of wastewater to a central treatment facility, lagoon, or collection facility.

The subdivision agreement should require abandonment of the central collection or treatment facility when city sewer service becomes available. The cost of abandonment and closure of the interim facility will be assessed to property owners in the acreage area. The central collection facility can be developed on the outlot reserved for eventual urban development.

Individual Systems

When services are extended, all lots in the acreage plat must connect to the city system, with the abandonment of private septic or other individual systems. The subdivision agreement should waive the right to protest assessments for the cost of local sewer lines in this event.

Water

- On large acreage lots (3 acres and larger), individual wells or private systems are permitted. These lots also may use individual wastewater disposal systems.

- On intermediate acreage lots (1 to 3 acres per unit), a community system or rural water service is required.

- All water lines should be installed to city standards, providing 6-inch minimum mains with copper or cast iron pipes. Stubs and mounts for fire hydrants will be required.

- Upon annexation, with the availability of municipal water, all acreage development must connect to city water supply. The subdivision agreement should waive the right to protest assessments related to this connection. For acreages using individual or private systems, these costs will include

construction of city standard water mains, installation of fire hydrants, and other costs related to connection to municipal water. For acreages served by community or rural water systems, costs will include connecting the existing system to municipal water and any reimbursements necessary to the rural water district for conversion from rural to municipal service.

Stormwater

The acreage component of the parcel must detain storm water in such a way as to produce no net increase in the volume of storm water that drains onto neighboring property, including the outlot reserved for future urban development. Alternatively, a portion of the outlot may include a retention or detention structure that detains incremental run-off from the acreage development. This use does not count against the limit of the total parcel used for acreage development. This stormwater management structure may be eliminated with future development of an overall stormwater management system that serves the completed project.

Capital and Conversion Costs

These standards will result in significantly higher development costs than conventional rural acreage development. As a result, those who desire an acreage in a close-in location within the Tiers II and III areas will pay a premium for their lot – a reasonable public policy that will tend to direct lower-cost acreages into rural areas in the county that are beyond the reach of conceivable future service extensions. Current practice of acreage development within the city jurisdiction indicates preferences for paved streets and, in many cases, community wastewater and water systems; therefore, the market appears to support the costs associated with these higher standards.

The BTA concept requires subdivision agreements that will waive the right to protest future assessments for transitions to urban services upon annexation. In addition to being included in the subdivision agreements, these provisions must be included as a deed restriction that follows the sale of properties. This provides buyers of property with full disclosure of future liabilities and commitments that govern the property that they are purchasing. Table 5 summarizes these transitional requirements for acreage subdivisions under the BTA provisions:

Table 5
Transitional Obligations on Annexation for BTA Developments

Infrastructure System	Initial Construction	Transitional Obligations	Estimated Cost (2003) per front foot
Streets	Intermediate Construction Standard (Table 4)	• Replacement of paving and profile to city standard. • Curb and gutter installation. • Filling ditches. • Concrete sidewalk on both sides. • Street lighting.	71
Wastewater	Individual systems	• Sanitary sewer construction • Connection to city system • Abandonment and clean-up of individual system	17
Wastewater	Community systems, with lines built to city standard	• Abandonment of lagoons, community septic, or other endpoint. • Connection to city system.	10
Stormwater		• Storm sewer or stormwater management system construction, depending on subdivision design.	15
Water	Individual systems	• Water line construction • Connection to municipal system • Abandonment of well	20
Water	Community or rural water systems, with lines built to city standard	• Connection to municipal system • Compensation to Rural Water District	5

Table 6
Potential Transitional Costs for Various BTA Subdivision Configurations

Subdivision Configuration	Front Foot Cost	Transitional Cost for			
		80-foot lot	100-foot lot	150-foot lot	200-foot lot
Acreage on individual water/wastewater systems	$121	$9,680	$12,100	$18,150	$24,200
Acreage on wells and community wastewater system	$106	8,480	10,600	15,900	21,200
Acreage on community water and wastewater systems	$86	6,880	8,600	12,900	17,200

These liabilities are substantial, but necessary in order to provide future integration of interim acreage developments into a future city fabric. The premise of the BTA concept is that imposing these financial costs at the time of annexation encourages the planned re-subdivision of lots as provided by the transitional plat, achieving the city's ultimate growth objectives. Alternatively, a property owner could, at his/her discretion, elect to maintain a large residential lot, but at substantial cost. The follows the economic impact model presented above.

A potential danger is that, despite agreements and notifications to the contrary, owners at the time of annexation object to these costs to the City Council, and that the Council forges some type of settlement that either reduces the inducement to re-subdivide or inadvertently provides a public subsidy to reduce these costs. An escrow or sinking fund established over time to save for this eventual urban transition might reduce both the financial burden to property owners and the political pressures toward subsidy. In such a fund, the developer may make an initial contribution equal to a percentage of the ultimate estimated conversion cost (for example 25%), and provision for an ongoing contribution on a per lot basis by homeowners to this fund. The subdivision agreement then includes a waiver of right to protest an assessment that bridges any gap between the value of the urban conversion escrow fund and the actual costs related to the connection of the acreage development to urban services, or other necessary infrastructure or street upgrades.

The escrow concept could face legal difficulties, because of the lack of a nexus between contributions and eventual benefit. Annexation of Tier II and III properties is very long-term, and will not ordinarily occur for 25 years at the least. Some areas covered by the BTA provisions might not be annexed for a half-century. As a result, the escrow concept may most appropriately be established privately and marketed as an arrangement made by the developer to accommodate buyers of property. Because of uncertainties over these long-term arrangements, the city may encourage or even require the creation of such a fund through a subdivision agreement (just as cities sometimes require long-term maintenance and management of common space by a homeowners association), but probably cannot grant bonuses or other approvals contingent on the creation of such a fund.

Another concept is using the eventual development on the urban outlot to finance all or part of the transitional improvements on the acreage development. One mechanism would be requiring funding for transitional improvements with the initial platting or development of the outlot, in effect distributing these costs across land and lots in the urban development. An alternative scenario might create an improvement district for the entire development, using special assessments on the outlot to finance all or part of the acreage subdivision's transitional costs. Such a cross-subsidy arrangement must be established within the subdivision agreements that accompany the original acreage plat. While this concept can reduce the burden of urban transitions (and hence resistance to annexation or the possibility of exempting the acreage plat from transitional obligations), it does have several shortcomings, including:

- Adding cost to the urban development, potentially penalizing potential buyers of urban lots or houses in favor of owners in the acreage portion of the parcel.

- Discouraging the timely development of the urban outlot.

- Reducing financial pressures that tend to encourage the eventual conversion of the acreage development to a higher incremental density.

- Defining the threshold at which the urban outlot generates enough critical development mass to finance the urban conversion of the acreage development.

Nevertheless, cross-subsidization should be included as an acceptable method of financing the transition of the acreage development to urban services. The nature of the arrangement should be included in the subdivision agreement and carefully evaluated by the city when the subdivision is improved.

Application Requirements and Approval Process

The previous sections discuss the general parameters and standards for the BTA program. This section discusses the specific requirements of applications and the approval process for developments within Tiers II and III.

Community Unit Plan

All new residential developments in Tiers II and III must be approved as a binding Community Unit Plan (CUP). No new AGR zoning will be permitted within these development tiers outside of areas. The CUP will include the following components:

- A preliminary and final plat of the initial subdivisions, following all requirements of the City of Lincoln's Subdivision Regulations, for the acreage component of the development.

- A transitional plat, providing for eventual conversion to higher density. This transitional plat (also sometimes known as a "ghost" or "shadow" plat) establishes easements, dedications, and restrictions that govern the eventual conversion of the acreage to the next density increment.

- An urban framework master plan for the balance of the site, establishing the location and projected size of framework systems, including streets, urban infrastructure, parks and open spaces, greenways, and conservation features. The urban framework master plan demonstrates the ultimate relationship between the acreage and urban components of the CUP.

- A subdivision agreement that establishes the obligations and commitments of the parties, including the city, county, and developer.

- In the acreage development, deed covenants that will be filed on all lots in the acreage component, disclosing to all owners that the outlot is reserved for future urban development, consistent with the approved Community Unit

Plan; and disclosing the future obligations, including waiver of protest rights, included in the subdivision agreement.

Preliminary and Final Plats of the Initial Subdivision

These plats would follow all requirements in the city's subdivision regulations, establishing legal descriptions of the lots included in the part of the site allocated to acreage development. The remainder of the site, reserved for future urban development, would be described as an outlot. The general development of the outlot is included as the urban framework master plan.

Transitional Plat

A transitional plat will be submitted for the acreage component of a development. The transitional plat must provide for the minimum density increments set forth in Table 2. The transitional plat indicates:

- Final lot lines after the density transition that occurs with the extension of urban services.

- The layout of any additional streets not dedicated by the initial preliminary and final plats, but needed in the future to implement the transition. These rights-of-way should be maintained as dedicated right-of-way, outlots, or easements with the initial platting, and must not be incorporated into private property sales. If these rights-of-way are established as outlots or easements on plats, the subdivision agreements must clarify that they will be dedicated to the city without cost upon annexation and/or transition to urban services. In order to avoid challengeable actions, a preferable status for these future streets would be to dedicate them as right-of-way, and lease them back to the lot owner at nominal cost. The lease documents would provide for termination of the lease when the subdivision transitions through the BTA process.

- Easement locations for utilities and stormwater drainage. These easements should also be included in the preliminary and final plats for the initial subdivision.

- Building locations and/or envelopes necessary to accommodate the future subdivision.

The plat for the acreage development must include dedication of all easements and right-of-ways necessary to create a unified development, including easements through the outlot in accordance with the site master plan described below.

The transitional plat may utilize three different arrangements to expedite eventual re-subdivision at the time of annexation:

- *A transitional lot line approach.* Here, the initial buyer purchases a large lot, which in turn has underlying "shadow" lot lines that guide eventual re-subdivision. At the time of transition, a new plat will be approved that formalizes the ultimate subdivision. This plat approval will also require a change from the underlying AG zoning district.

- *A lot-bundling approach.* Here, smaller lots are legally described and bundled into one overall ownership. Thus, the owner of a three-acre parcel may actually own three separately described one-acre lots. In this approach, the initial subdivision actually adopts the transitional subdivision, and no further lot subdivision is necessary at the urban transition (unless the plat changes to a different configuration).

- *An ownership/land-lease approach.* Here, the property owner would own only the portion of the site that would be retained in the transitional plat, and would lease the balance of the parcel on a long-term basis. The lease would run for either a fixed period or until the time of extension of urban services with annexation. This, in the example presented above, the owner of a hypothetical three-acre parcel has legal title to the underlying one-acre lot and leases the other two acres on a long-term basis from a development or ownership trust entity. With the density transition, the lease terminates and the other two acres are subdivided, if this has not already occurred, and developed.

Any of these arrangements is acceptable and would be put in place at the time of plat approval.

Urban Framework Master Plan

The Urban Framework Master Plan must be submitted as part of the CUP for the entire parcel, and must be approved along with the initial and transitional plats. This master plan establishes the major systems that serve the overall development, documenting the relationships between the acreage plat and

ultimate urban development of the outlot. The Urban Infrastructure Master Plan indicates:

- The layout of arterial and collector streets on the site. These will typically include streets approximately on the half and quarter-section lines, along with connections to adjacent parcels.

- Major infrastructure lines, including water distribution, sanitary sewers, and storm sewers, if part of the stormwater management plan.

- A master stormwater management plan, indicating general grading concepts and directions, stormwater retention and detention structures, and storm sewers.

- Easements and dedications for all utility services.

- Parks and open spaces, consistent with comprehensive plan objectives.

- Trails and greenways, including connections to the regional trail system.

- Resource conservation or preservation areas, including wetlands, wooded areas, streams and waterways, and other features that will be maintained and incorporated into future development concepts.

- A recognition, on the Master Plan, that the ultimate objective is the development of the outlot to urban density. This is generally defined as a gross residential density of 4 units per acre on the portion of the site that is developed for residential purposes. This excludes land proposed for commercial development or other non-residential uses. The Urban Framework Master Plan may propose a land use master plan, displaying the location and relationship of various uses, but such a plan is not a requirement for approval.

Subdivision Agreement

The subdivision agreement is a critical element of the BTA process, and establishes the basis for transitions to urban services and development densities. Subdivision agreements on BTA projects must include the following provisions:

- Waiver of the right to protest assessment of urban conversion costs, including the gap between funds available through an escrow and actual costs of the transition.

- Agreement not to contest eventual annexation by the City of Lincoln.

- Commitment to file deed covenants or restrictions that disclose the reservation of the outlot for future urban development and the future obligations and commitments included in the subdivision agreement, including waiver of the rights to protest assessments related to the costs of urban conversion or eventual annexation by the City.

- Establishment, terms, and administration of an urban conversion escrow account, if such an account is established, or a cross-subsidization concept, if development on the outlot finances all or part of the transitional costs of the acreage. Suggested capitalization is from an initial development contribution and an ongoing contribution per lot or acre into the escrow by subsequent property owners. Urban conversion costs include costs related to:

    - Transition of streets from intermediate to urban section, including filling of drainage swales and installation of curb and gutter.

    - Transition from community or individual wastewater systems to urban sewer systems.

    - Transition from individual, private, community, or rural water supply to municipal water supply, including reimbursement of the rural water district.

    - Modifications of stormwater management systems.

The problem of the nexus between contributions to the fund and long-term expenditures and benefits is noted above. The fund can be recognized in the Subdivision Agreement much as perpetual management of common areas by a homeowners' association, but should not be a requirement of approval of the development.

A sample of a possible subdivision agreement containing BTA provisions and requirements is included as Appendix One.

Deed Covenants

Deed covenants will be drafted and approved as part of the CUP that include the disclosures required by the subdivision agreement. The agreement obligates the developer to file these restrictions on each lot sold.

Conclusion

The BTA technique provides a mechanism that permits limited acreage development within Lincoln's future urban service area, while preserving the city's long-term ability to extend services and grow as a unified urban community. The standards and concepts presented here are designed to provide for events that may occur three to four decades in the future – the eventual change of land development patterns in these growth tiers from rural to urban character. Putting a system in place now to aid this long-term transition can meet the reasonable expectations of economic return for existing property owners, accommodate the immediate market for rural residential development anticipated by the Comprehensive Plan, and allow Lincoln to grow efficiently as a city.

While we believe that the BTA concept should be put in place in the short-term, we must point out that the transitional concept raises additional issues that must still be resolved. These issues include:

- *Changes of school district boundaries upon annexation.* Property annexed by the city is also annexed into the Lincoln School District. If BTA results in a significant acreage population in Tiers II and III, property value captured by suburban or rural school districts will be lost to those jurisdictions and incorporated into the Lincoln system. This creates a tax base that should be addressed in advance of actual urban transitions.

- *Rural water district settlements.* Extension of municipal water into areas that receive service from rural water districts (RWD's) will reduce the customer base of these districts. On the other hand, freeing of development within Tiers II and III by the City may produce short-term customer gains for RWD's. The nature of equitable transitional payments that compensate the

rural districts for lost revenue, while recognizing that BTA may produce more customers in the shorter term, remains an item to negotiate. Developing a fair and predictable system of compensation can speed the process of transition at the appropriate time.

These issues are long-term in nature, and the transitional events that trigger them will occur well into the future. As such, the fact that they are outstanding should not delay implementation of a thoughtful BTA program that is generally acceptable to all stakeholders.

APPENDIX ONE
SAMPLE SUBDIVISION AGREEMENT

THIS AGREEMENT is made and entered into by and between Tier II Development, Inc., a Nebraska corporation, hereinafter called "Subdivider" and the City of Lincoln, Nebraska, a municipal corporation, hereinafter called "City."

WHEREAS, Subdivider has made application to City for permission to subdivide and for approval of the subdivision plat of BTA ACRES; and

WHEREAS, said plat is located within the Tier II development area specified by the Comprehensive Plan of the City of Lincoln; and

WHEREAS, all plats proposed in Comprehensive Plan Tiers II and III are subject to the requirements of the City of Lincoln's Build-Through Acreage (BTA) regulations; and

WHEREAS, the resolution approving said plat contains provisions requiring an agreement between Subdivider and City relating to said plat and the development thereof, including specific commitments to implement BTA regulations.

NOW, THEREFORE, IN CONSIDERATION of City granting permission to plat and approval of the plat of BTA ACRES, it is agreed by and between Subdivider and City as follows:

1. The Subdivider agrees to submit an erosion control plan to the Director of Public Works.

2. The Subdivider agrees to pay all improvement costs and to complete the private improvements shown on the preliminary plat and the community unit plan.

3. The Subdivider agrees to preserve and maintain Outlot 1 as open space in its current natural state on a permanent and continuous basis, or to convey the property to a property owners association, land trust, or other association that will maintain the outlot. Any such conveyance shall be accompanied by a written document clearly presenting the terms and conditions of transfer of ownership and maintenance responsibility, and shall include a proof of financial and administrative capability to execute this responsibility. In return for this commitment, the City has granted a density bonus, permitting the Subdivider three lots in addition to those normally permitted by the underlying zoning.

4. The Subdivider will maintain Outlot 2 as open space and will submit no development application on the outlot until such time as municipal services, including water and sanitary sewer, are available to the outlot and the entire plat becomes eligible for annexation. The Subdivider recognizes that Outlot 2 shall be reserved for future urban development; may accommodate a mix of residential, cffice, commercial, civic, and other potential urban uses; and may include residential properties with gross densities ranging from 5 to 50 units per acre. The Subdivider agrees to include a notice of this intention and understanding as a deed covenant on all properties and residential lots conveyed in BTA Acres.

5. The Subdivider recognizes that at the time of annexation, public infrastructure and streets within BTA Acres will be brought to City standards and connected to City water and sewer facilities. The Subdivider and subsequent property owners agree to finance these transitional costs privately or through a special assessment district. If a special assessment district is created, the Subdivider and subsequent property owners agree not to protest any assessment related to the cost of these transitional improvements. Transitional improvements shall include:

a) Upgrading of streets within the subdivision to meet full compliance with city street design standards. Upgrading may include re-profiling of the street to a standard acceptable to the Public Works Director, filling drainage ditches and swales, installation of storm sewers and inlets, construction of curbs and gutters, construction of sidewalks on both sides of the street, and installation of standard street lighting.

b) Constructing streets designated in the community unit plan or in the transitional plat submitted and recorded for BTA ACRES.

c) Disconnecting and remediating community wastewater treatment facilities and connecting the sewer system serving the subdivision to City sewer mains.

d) Connecting the subdivision's water distribution system to the municipal water system, and negotiating and funding a settlement with the Rural Water District for cessation of rural water service.

e) Constructing storm sewers and other required storm drainage structures, consistent with the terms of the community unit plan.

The Subdivider shall record this agreement as a deed restriction which shall run with the land and be a part of any subsequent conveyance of property within the plat.

6. Future streets indicated within the transitional plat for BTA ACRES shall be dedicated to Lancaster County or the City of Lincoln as public rights-of-way, but may be leased to the owner of adjacent property or properties until the time of annexation. Such property owner waives the right to protest the termination of such lease or the subsequent construction of a street and sidewalks on these rights-of-way.

7. The Subdivider and subsequent property owners waive the right to protest annexation of BTA ACRES by the City of Lincoln.

8. The Subdivider agrees to record the terms and provisions of this Agreement, which binds future property owners, as a deed covenant to run with the land and be a part of each subsequent conveyance of any property within the subdivision. The Deed Covenant shall be reviewed by and be in a form acceptable to the City Attorney.

9. The agreements contained herein shall be binding and obligatory upon the heirs, successors, and assigns of the Subdividers and all subsequent property owners in BTA ACRES.

Dated this _____ day of _____.

Tier II development, Inc.
A Nebraska Corporation

_____ _____

APPENDIX TWO

SUMMARY OF COMPARABLE EXPERIENCE IN ACREAGE DEVELOPMENT REGULATION

Jurisdiction	Plat Requirements	Legal Issues	Infrastructure Requirements	Comments
Ames, IA	-	-	-	This issue is not addressed.
Anne Arundel County, MD	-	-	If the County has a plan to extend public sewer into the area, capped sewer lines must be installed. If the subdivision is located within 2,000 feet of public sewer facilities, the developer must provide sewer connections to each lot.	-
Denver, CO	-	-	-	This issue is not addressed. Unsewered development is generally not permitted in the City.
Howard County, MD	-	-	For lots less than 3 acres in areas expected to receive urban water or sewer service in less than 2 years, developers must install capped water or sewer lines and connections for each dwelling. If lot size is greater than 3 acres, permanent on-site facilities may be used.	-
Indianapolis, IN	-	-	-	Acreages are only permitted in areas where extension of urban services is not anticipated.
Madison, WI	-	-	-	This issue is not addressed. Unsewered development is generally not permitted in the City.
Oklahoma City, OK	-	-	-	This issue is not addressed.
Overland Park, KS	-	-	-	Rural estates are allowed in some areas, but resubdivision is not addressed.

Jurisdiction	Plat Requirements	Legal Issues	Infrastructure Requirements	Comments
Portland, OR	-	-	-	Minimum lot size for future urban areas within Urban Growth Boundary is 20 acres.
Scott County, MN	In areas designated for urban expansion a "ghost plat," or build-out plan must be submitted for acreages showing the future lot design consistent with the Comprehensive Plan, layout of future streets, easement locations for stormwater drainage and utilities, and locations of buildings of each site to accommodate for future resubdivision. Cluster subdivisions are also used in urban expansion areas.	In cluster subdivisions, deed covenants are required disclosing that the open space is reserved for future urban development.	-	-
Springfield, MO	-	-	-	This issue is not addressed.
St. Cloud, MN	Lots larger than one-half acre or has a street frontage in excess of 150 feet initially served by private septic systems must include a "ghost plat," or a sketch plan of a subdivision of lots and public right-of-ways within the preliminary plat for each lot that depicts future subdivision of the property facilitated by the extension of urban services.	-	-	-
St. Croix County, WI	Comprehensive plan recommends implementation of "ghost platting," or requiring a sketch plat of how acreages could be resubdivided into smaller lots.	-	-	-
Topeka, KS	-	-	-	This issue is not addressed.
Tulsa, OK	-	-	-	This issue is not addressed.

Jurisdiction	Plat Requirements	Legal Issues	Infrastructure Requirements	Comments
Urbana, IL	-	-	If public sewer service is not available, residential developments with 10 or more units must include capped sanitary sewer and lateral lines until service is available.	-
Wichita, KS	If a rural plat is located within the urban growth boundary, a "lot bundling" plan must be submitted with the preliminary plat. This must indicate how each lot may be resubdivided for urban scale development as well as contingent street dedications.	A restrictive covenant must be submitted tying the lots together and limiting each building site to one dwelling unit until urban services become available. The covenant must also restrict the location of structures on the plat to avoid interference with the possible future streets and setbacks and limit future development.	-	-
Woodbury, MN	Comprehensive plan recommends implementation of "ghost platting," or requiring a sketch plat of how acreages could be resubdivided into smaller lots.	-	-	-