ARCADIA HEIGHTS, BENCHMARK, & H ROCK SMALL AREA PLAN

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Prepared by

Salt Lake City Planning Commission & The Arcadia Heights / Benchmark / H Rock Small Area Plan Steering Committee

> Adopted by The Salt Lake City Council October 6, 1998

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ARCADIA HEIGHTS / BENCHMARK / H ROCK SMALL AREA PLAN

The current East Bench Master Plan, adopted in 1987, provided for preparation of supplemental plans, in the "form of redevelopment plans, target area plans, or tactical neighborhood studies" intended to address specific issues or areas of the East Bench as issues were identified and changes occurred over time.

In 1995 the City received an annexation petition and preliminary development plan for a portion of the Romney/Carson property, located east of Benchmark Subdivision. Prior to that, other development had been proposed on several properties north of Arcadia Heights Subdivision and east of Wasatch Drive. Even though the East Bench Master Plan addresses annexation issues and foothill development in general, the City felt it would be wise to evaluate in greater depth the issues, policies and standards that apply, or should apply, to this area before specific petitions for annexation or development approval were accepted. In addition, concerns had been raised by residents in the Plan Area relating to: the development potential and future impacts of existing undeveloped lots on the neighborhood; traffic and access issues; preserving compatibility of scale in established neighborhoods as property owners upgrade existing homes; and, park and open space issues.

Based on the provision of the East Bench Master Plan referred to above, it was suggested that this Small Area Plan be initiated to evaluate these issues.

Statement of Purpose

The purpose and intent of this Small Area Plan is to evaluate existing conditions within the Plan Area, identify pertinent issues relating to existing and future land uses, and make recommendations and establish policies for future land use and development of land within the City's boundaries as well as land which may be annexed in the future. Once adopted, it is the intent that this Plan be recognized as an amendment to the East Bench Master Plan.

Plan Area

The Plan Area is bounded on the south by Interstate 80, on the west by Foothill Drive, on the north by 1700 South Street, and on the east by the boundary of the Wasatch National Forest. This area contains some of the last parcels of undeveloped foothill property on the East Bench, most of which are not yet within the City's corporate boundaries.

Process

In March of 1997 the Salt Lake City Planning Commission recommended that a Steering Committee be formed to oversee the development of this Small Area Plan. The following individuals have participated as members of the Steering Committee:

Organization / Department

Representative(s)

Planning Commission

Andrea Barrows
Carlton Christensen
Craig Mariger
Jim McRea
Kimball Young

Arcadia Heights / Benchmark

Community Council

Tanta Lisa Clayton Lynne Modesitt

H Rock Community Council

Jerry Bergosh Laurie Hoffman

Indian Hills Community Council

Mike Zuhl

Sunset Oaks Community Council

Tim Dee

Southeast Community Association

Suzanne Weaver

Carrigan Cove Homeowners

Kim Peterson

Romney Family

Mel Romney Tony Romney

Properties north of 2100 South and

Scott Turville

west of Lakeline Drive

S.L.C. Public Utilities

Chuck Call

S.L.C. Transportation Division

Kevin Young

S.L.C. Planning Division

Bill Wright

S.L.C. Council Office

Janice Jardine

S.L.C. Community Affairs

Pauline Zvonkovic

The Steering Committee held meetings every two weeks beginning on April 28, 1997, and running through February 1998. The Salt Lake City Planning Division, represented by Craig Hinckley and Doug Wheelwright, provided staff support to the Steering Committee. Additional assistance was provided by John Swain, Director of Park Planning for Salt Lake City, and Ritchie Taylor and Larry Kirby representing the Utah State Department of Transportation.

Issues & Recommendations

In its deliberations, the Steering Committee considered a wide range of issues which are identified and discussed below under four general categories. These categories are: New Foothill Development, Existing Development, Open Space & Recreation, and Traffic & Circulation. In the remainder of this plan a brief discussion of each issue under these categories will be provided, followed by the recommendation(s) relating to that issue.

There are two potential development sites within the Plan Area which require specific recommendations. The first is on the Romney/Carson property east of Benchmark Subdivision and the second consists of several properties in the middle of the Plan Area which have been combined for a development proposed by Scott Turville. These two sites will be referred to below as the "Romney Property" and the "Turville Property".

There is also property located between the north end of Scenic Drive and the south end of Mohawk Way which has been proposed for development in the past. This area is within the City's boundaries and was rezoned to FP (Foothill Preservation) as part of the Zoning rewrite in 1995.

Due primarily to steep slopes, this property appears to have only limited development potential.

New Foothill Development

The issue of additional foothill development within the Plan Area has been hotly debated for many years between those who would like to see areas preserved as open space providing public access to the mountains and a visual amenity and those who view vacant foothill properties as highly desirable, and valuable, development sites. Both of these viewpoints were well represented on the Steering Committee for development of this Plan. The majority of those Steering Committee members present at the meetings expressed the preference that no further foothill development be considered. However, should the City consider such development, the highest priority should be given to very low density residential proposals which will preserve the unique beauty of the foothills, preserve wildlife habitat, provide access to recreation use and open space, and minimize visual impacts and soil disturbances. The following sections identify issues that should be considered if further development is considered.

Issue: Development Restrictions On Slopes Equal To Or Greater Than 30%

There are currently restrictions included in the City's development code which prohibit construction on slopes over 30% (a ratio of 3 vertical feet to 10 horizontal feet). Slopes equal to or greater than 30% are considered to be undevelopable. This restriction applies to building construction as well as construction of public improvements. This restriction has been established for several reasons:

- 1. Environmental Impact, Life/Safety. The undeveloped foothills within the Plan Area represent a delicate ecological balance. Soils are sandy and granular and in some areas form only a very thin cover over the underlying bedrock. They are also highly susceptible to erosion when the fragile vegetation cover is removed. When disturbance occurs, the potential for erosion and/or property damage from slope failure (landslides) and flooding due to increased velocity of runoff increases. This is especially true along the dry south and west-facing slopes which are typical in the Plan Area. As slopes become steeper, larger cuts and fills associated with construction are needed and larger areas are disturbed. The steeper slopes are, the more difficult it is to restore land to a stable condition.
- 2. Aesthetic Impact. The Wasatch Mountains surrounding Salt Lake City create a natural setting which is one of the most spectacular of any city in the country. There is a public interest in preserving this setting by establishing standards for site development in the foothills designed to minimize visual impacts. The City has established policies in its Master Plan for view corridor protection which identify the foothill panorama as an asset for the community at large.
- 3. Costs for Delivery of Services and Maintenance of Public Facilities. Services provided by the City include, among other things, police protection, fire protection, garbage pickup, and snow removal. The City is also responsible for maintaining public improvements such as streets, water systems, sewer systems, and storm drainage systems. The cost to the public for providing these services is higher in areas of steep terrain for the following reasons:
 - a. Streets in steeper foothill sites are generally at the high end of allowable grades which may increase emergency response times in winter due to

slick or temporarily impassable roads;

- b. In summer, larger and heavier vehicles, such as fire engines and garbage trucks, may have difficulty negotiating steeper streets when hot weather has softened the asphalt surface;
- c. Deformation of street paving caused by vehicle braking on downhill stretches may require more frequent maintenance;
- d. Erosion susceptibility from storm runoff is greater, causing larger volumes of sediment to be deposited in storm drainage systems resulting in more frequent maintenance.
- 4. Development difficulties. Steep land presents practical difficulties in development such as designing/adapting a building to the site, providing driveway access at reasonable grades, and providing usable outdoor living space.

In it's discussions, the Steering Committee felt that a clear set of policies should be established in order to provide consistent interpretation and application of this development standard.

Recommendations:

- 1. It is the intent of this plan to reaffirm the principles and standards pertaining to foothill development contained in the Salt Lake City Site Development Ordinance and Zoning Ordinance. This recommendation applies to interpretation of 30% slopes as well as to all other foothill development standards.
 - 2. The current 30% slope restriction should be maintained.
- 3. Cuts and fills should be minimized in order to reduce the aesthetic impact on hillsides. If cuts are necessary, material should be removed from the site rather than deposited in areas which will only increase the area of disturbance. The maximum vertical height of a cut should not exceed the current standard (15 feet).
- 4. It should be the intent of the City that the long term goal of repairing areas disturbed by development should be to return the terrain, as near as possible, to a "natural", pre-development, condition. This should generally be done through re-grading of disturbed areas rather than using retaining structures. Retaining structures should only be considered when repairing near the maximum standard for cuts or where available space does not permit re-grading to an acceptable slope. Grading, erosion control, retaining wall, and revegetation plans should be reviewed and approved by the City prior to the beginning of site development.
- 5. Repair/reclamation should begin on the date construction begins, should continue concurrently with the construction, and should be completed within 30 days after construction ends.

Issue: Undevelopable Land

The subject of "undevelopable land" was discussed at some length by the Steering Committee. Undevelopable land is land within a development which, due to steep slopes or other

limiting factors is not developable under the City's current development standards. The primary issue was whether these lands should remain in private ownership or become public land.

In the past, undevelopable land within proposed subdivisions has typically been identified as such in the subdivision plat but has been incorporated as portions of lots. The exception to this occurs in planned developments, such as Carrigan Cove, where the majority of undevelopable land may be designated as common area with each property owner in the development having an equal, undivided, interest. Some members of the Steering Committee suggested that property owners appreciate ownership of the land even though it is not developable. In addition, when undevelopable areas remain in private ownership, whether individually or by a Homeowner's Association, there is the ability to control/exclude non-residents or non-owners. However, one of the problems with including undevelopable land in individual lots is that over time, as ownership changes, it is difficult to monitor what occurs on these lots. Landscape development or establishment of accessory uses may encroach into the area of the lot which is designated as undevelopable and thus should remain undisturbed and maintained in its natural condition.

There is a public interest in preserving undevelopable land as open space or for recreation use and various methods are available to accomplish this. These include: establishing conservation easements which allow land to remain in private ownership and help insure long term open space preservation; donation to a land trust or other public and/or non-profit organization whereby the donor receives a tax benefit; sale of land to a land trust or other public and/or non-profit organization at less than its market value (bargain sale) in which the donor would also receive a tax benefit; or, sale of land to a land trust or other public and/or non-profit organization in fee simple at market value.

Recommendations:

- 1. It should continue to be the City's policy that undevelopable land be preserved through acquisition, donation to a land trust, establishment of conservation or access easements, or other mechanism.
- 2. The City should budget funds annually for acquisition of lands to be preserved as permanent open space and should also seek additional sources of public and private funding for this purpose.
- 3. Undevelopable land within a proposed development should not be considered in calculating permitted density.
- 4. In order to better control encroachment and minimize potential enforcement, undevelopable land should not, insofar as possible, be incorporated into individual building lots.

Issue: Residential Density / Zoning Classification for Annexed Land

Several factors may affect the ultimate development pattern and density of land within the Plan Area which is currently vacant and is not under the City's jurisdiction. These factors include slope, topographic features, orientation, natural hazards, availability of services, and/or the ability to provide services which are not currently available. As the Steering Committee discussed this issue, it soon became clear that the steepness of slope was the most critical of these factors in arriving at an overall density.

- 1. Residents and public sentiment have expressed opposition to any further foothill development. Properties which are undeveloped should remain as they are in order to maintain the aesthetic qualities of the foothills and the City's natural, undeveloped mountainous backdrop. Public acquisition of these areas is encouraged.
- 2. If additional development is considered, it should be very low density that does not impair the natural qualities of the area and preserves the maximum amount of open space. Restrictions on development affecting slopes equal to or greater than 30% should be strictly enforced and interpreted according to written administrative policies established by the City. Gated developments should be strongly discouraged
- 3. The southern end of Scenic Drive should be extended with an appropriate terminus to accommodate not more than three to four additional homes.
- 4. Development around the cul-de-sac at the north end of Lakeline Drive should be completed with not more than three to four additional homes.
- 5. The following policies should be taken into consideration when determining the zoning classification for properties which may be annexed in the future;
 - a. Lots should be a minimum of one half acre in size;
 - b. Not more than four additional lots should be permitted at the south end of Scenic Drive and not more than four additional lots should be permitted at the north end of Lakeline Drive;
 - c. New lots should be oriented to a new cul-de-sac, or other terminus, at the south end of Scenic Drive and to the existing cul-de-sac at the north end of Lakeline Drive;
 - d. all new lots should conform to the dimensional and height standards of the FR-2 Zone and to all established Foothill Development Standards.

Issue: Utility Service

Public utility systems (water, sewer, and storm drainage) are in place and serving the existing neighborhoods in the Plan Area although some elements of the sanitary sewer system, as identified in the East Bench Master Plan, are inadequate and need to be upgraded. The Salt Lake City Public Utilities Department has evaluated the capacity of these systems to serve additional development on the Romney and Turville Properties and its recommendations, subject to review and approval of final plans, are listed below

- 1. Any costs relating to increased impacts created by new development should be paid for by the developer.
 - 2. Water Service.
 - a. Romney Property. This subdivision is located on the upper edge of the distribution zone. Water service can be provided to the second floor of a

dwelling to a maximum elevation of 5190 (USGS datum). Each lot will need to be evaluated on a case by case basis. New distribution water lines will need to be installed as part of the subdivision development. Any habitable areas above elevation 5190 will require new pumping and reservoir facilities. (For planning and mapping purposes a ground, or main floor, elevation of 5175 (USGS) should be assumed)

b. Turville Property. This area can be serviced from existing pumping and reservoir facilities in Carrigan Cove Subdivision. New distribution water lines will need to be installed as part of the subdivision development.

3. Sewer Service.

- a. Romney Property. Sewer lines from this development would be connected to existing sewer lines in Benchmark Subdivision. Downstream facilities appear to be adequate to handle this additional flow.
- b. Turville Property. Sewer lines from this development are proposed to be routed through easements and existing rights-of-way to 2100 South Street. All of this flow will be collected in an existing 8-inch line crossing Foothill Drive. This collection line is currently overloaded and will require up-sizing in order to accommodate the projected flow from this proposed subdivision.
- 4. Storm Drainage. Drainage system design for both proposed subdivisions will need to comply with the City's Restricted Discharge Policy. This policy restricts discharge from a site to .2 cubic feet per second per acre for the 24-hour 100-year storm.
- 5. Capital improvements to sanitary sewer system identified in the East Bench Master Plan should be completed.

Issue: Annexation Policy

The 1997 Utah Legislature amended the State's annexation law in several significant ways. Among other things, it is no longer required that developers proposing projects within 1/2 mile of a municipal boundary petition for annexation. The only incentive for doing so at present is the need for municipal services, as required for developed land, which are not available, or cannot be provided, in the County.

In Resolution 20 of 1982 (February 2, 1982), the City formalized its policy on providing water service to developments outside the City limits. This Resolution states, in part, that water will only be provided on the condition "that the requesting entity, when it is possible to annex, is officially annexed to the City, or where not immediately possible, agrees to annex when annexation potential exists under State law". Since it is in the City's best interest to have input in planning for compatible land uses at its borders, the City should continue to require that undeveloped land be annexed prior to development.

Recommendation:

1. It should continue to be the City's policy that municipal water and sewer service will not be provided to new developments unless they are located within the City

limits.

Issue: Environmental Hazards

The Steering Committee discussed various environmental hazards which, due to topography or location within the study, may affect development. These natural hazards may include rockfall, areas which may be impacted by debris flow, seismic hazards, and/or wild fire. Concern has also been expressed about potential "man-made" hazards such as failure of rock retaining walls or damage to and/or failure of major infrastructure such as water lines.

Recommendations:

1. Rockfall. Rockfall may be caused by ground shaking from an earthquake or by frost action. An area of potential rockfall, associated with an abandoned rock quarry, has been identified on the Romney Property. The *Geologic and Geotechnical Investigation, Romney/Carson Property* (Applied Geotechnical Engineering Consultants, 1995), made the following recommendations:

"The source of rockfall hazard identified at the site appears to be relatively small. These areas could be avoided. Alternatively, scaling of rocks which could be dislodged from slopes above the site would likely be the most feasible mitigation measure, if residential construction is planned in the rock runout zones. Alternatively, berms could be constructed at the base of the slope to deflect or stop rocks from encroaching on areas proposed for development."

If development takes place on the site in the potential rockfall zone, the recommendations of the Geologic and Geotechnical Investigation should be implemented.

- 2. Debris Flow. Natural debris flows are a mixture of water, rock, soil, and other debris which typically originate in steep confined canyons and are triggered by rapid runoff from snow melt or summer thunder storms. Two ravines exist on the Romney Property which have the potential for generating debris flows. However, a geotechnical investigation completed in 1995 indicates that the potential is relatively low at the present time. Even so, these areas should be avoided as potential building sites
- 3. Seismic Hazards. The primary mapped segments of the Wasatch Fault Zone are located approximately two miles to the west of the Plan Area in the vicinity of 1300 East. An apparently unrelated fault has also been mapped in Carrigan Canyon (Personius and Scott, 1992). The Engineering geology Evaluation and Geotechnical Investigation, Carrigan Cove Subdivision (Chen & Associates, 1981), addressed this fault as follows:

"The ancient fault ... strikes parallel to the north slope of Carrigan Canyon and is inactive. It has been estimated that movement along this fault has not occurred within the last 3 million years (Van Horn, 1972). Setbacks or special design considerations along this fault, for the proposed development, are not warranted."

It appears that the primary concern relating to seismic activity is ground shaking resulting from earthquakes along the primary, active, segment of the Wasatch Fault Zone. In order to minimize potential property damage, all building construction should be performed in strict conformance with building code standards for Seismic Zone 3. All critical infrastructure improvements should be designed and constructed to comply with standards

for Seismic Zone 4.

4. Wild Fire. There have been incidents in the recent past where fires in the foothills have threatened residential properties. In order to minimize potential property damage, the use of fire resistant roofing and exterior finish materials should be encouraged for all homes constructed in the foothills. In addition, the City should consider enacting an ordinance requiring that an acceptable open area buffer be maintained around all homes. Access routes for emergency vehicles should also be designated and maintained without obstructions.

5. Man-made Hazards.

- a. Rock retaining walls. Rock retaining walls, if not properly constructed, may represent hazard similar to natural rockfall. Rocks may be dislodged from such structures due to saturation of the ground around the wall, frost action, or ground shaking resulting from an earthquake. Therefore, engineering and construction standards for rock retaining walls should be developed and adopted by the City.
- b. Infrastructure Damage. In October 1997 a water transmission line below the "H Rock" ruptured causing serious erosion and property damage below the break. This water line is scheduled for replacement in 1998. However, in order to help minimize the future incidents, it is recommended that:
 - i. future pipelines be constructed to Seismic Zone 4 standards, as recommended in #3 above; and,
 - ii. that additional shut-off valves be installed on water and sewer lines so that breaks can be isolated, and the affected sections of the system shut down, as quickly as possible.

Issue: Wildlife Habitat

The current East Bench Master Plan addresses this issue as follows.

"East Bench foothills provide an important habitat for numerous wildlife species and critical winter habitat for Mule Deer. Recent hard winters have forced deer and elk into existing subdivisions to browse on trees, shrubs, and other vegetation around homes. In some areas, damage to ornamental vegetation is extensive.

Development may continue regardless of the effect on wildlife, and owners of foothill properties will continually have problems with deer in harsh winters. The following steps are recommended as a means of improving compatibility between deer herds and foothill developments.

- Provide deer feeding and grazing area as a part of each subdivision.
- Cluster homes to preserve larger open areas.
- Plant types of vegetation that can be protected from deer by wrapping with burlap during winter months.

- Plant vegetation for deer grazing in undeveloped foothill areas.
- Fence areas of critical concern to keep deer out.

The City and State should work with property owners to accomplish these tasks. City ordinances should be modified to require feeding areas. Developers should design projects with habitat preservation in mind and fence critical areas, such as areas containing expensive landscaping, to keep deer out. The State should continue to revegetate foothill areas and assist all private efforts to protect wildlife habitat."

Recommendations:

- 1. This plan reaffirms the recommendations of the current East Bench Master Plan as quoted above.
- 2. Critical habitat areas and migration routes should be identified and preserved as open space.
- 3. In order to help implement recommendations above relating to landscaping and planting for grazing, the City should develop a plant list which includes "deer-proof" species as well as species that are attractive to deer and other wildlife.
- 4. A set of parallel fences have been constructed running south from the end of Devonshire Drive. These were intended to designate and preserve access for the Bonneville Shoreline Trail. However, this fenced corridor has become a "trap" for deer moving through the area. This barrier should be modified to alleviate this problem by reducing the height of the fences from six feet to four feet.

Existing Development

Issue: Lots in Approved Subdivisions Which Have Not Been Built Upon

Over the years, a number of lots have been approved and recorded in the Plan Area which, so far, have not been built upon. There may be several reasons for this: lots may have been purchased on speculation; lots may have been purchased by an individual who plans to build at some time in the future; or, physical characteristics of the lot present a challenge to development. Time will resolve the first two conditions. The third condition is particularly relevant in Benchmark Subdivision which was designed and approved under less stringent foothill development standards than are currently in effect.

- 1. Existing zoning of developed neighborhoods within the Plan Area should remain unchanged except as recommended under "Maintaining Character/Compatibility in Established Neighborhoods" below.
- 2. Even though some lots may be difficult to develop, all future development should be required to strictly comply with all applicable setback, height, and site development standards. In cases where larger lots would provide more flexibility in designing and constructing homes to meet these standards, owners/developers should be encouraged to combine lots.

Some of the earlier neighborhoods within the Plan Area are now over 40 years old and are occupied by the second or third generation of homeowners. It is not unusual for new owners, as well as long-time residents, to renovate, upgrade, and/or enlarge older existing homes. Some property owners may also be considering converting their homes to duplexes. This has created a concern among many residents about maintaining the character of these neighborhoods. One of the primary ways to accomplish this is through establishing and strictly enforcing uniform zoning standards.

Recommendations:

- 1. Future infill development and major renovations of existing homes should be compatible in height and scale with existing development. In order to implement this recommendation, the R-1-12,000 Zone and portions of the SR-1 Zone within the Plan Area should be changed to FR-3 so that height standards will be compatible with other, adjacent, foothill subdivisions.
- 2. More rigorous planning & zoning approvals and building inspections should be encouraged to insure compliance with development and design standards attached to the issuance of building permits.
- 3. Building Code and zoning enforcement should be conscientiously applied in order to insure that building renovation is done only with a valid permit.

Open Space & Recreation

Issue:

Bonneville Shoreline Trail

The Bonneville Shoreline Trail (BST), as the name implies, is intended to provide a continuous trail system along the Wasatch Front which approximately follows the prehistoric high shoreline established by Lake Bonneville approximately 25,000 years ago. Salt Lake City has done extensive planning for this trail system in recent years, designating routes and improving several sections. Planning for the trail within the Plan Area is critical since this is the point where its users will leave and enter the City. Planning is made particularly difficult due to the natural barrier of Parley's Canyon and the man-made barrier created by the Parley's Interchange of Interstate 80.

- 1. A Class I asphalt bike path should be developed from the intersection of Wasatch Drive and Thunderbird Drive south along the front of five commercial properties to connect to the Parley's Crossing Project North Bridge at the old Wasatch Drive roadbed south of the City limits.
- 2. A shared, dirt, hiking/mountain bike path should be developed from the top of Benchmark Drive south along the Lake Bonneville Bench on the existing dirt to connect foothill access points "2.F." and "2.G." (as described under "Other Trails" below) and then continuing westward, downhill, to connect to the Parley's Crossing Project North Bridge.

- 3. Other related improvements to the BST should include:
 - a. a protected crossing at Sunnyside Avenue (outside Plan Area);
- b. a Class I or II trail adjacent to Wasatch Drive through the Bonneville Golf Course (outside Plan Area); and
- c. a pedestrian crossing at Thunderbird Drive, across Foothill Drive to link the neighborhoods east of Foothill Drive with neighborhoods in Sugarhouse, and provide the greater community safe access to the BST.
- 4. The BST section connecting Devonshire Drive and Lakeline Drive should be established, and signed, as a pathway separate from the existing and/or future travel way of any public or private street.

Issue: Other Trails

As mentioned above, the BST is not a single trail but a system of trails. As it passes through the City it is intended that it link local trails along its route with one another thereby increasing the range and extent of experiences available to trails users.

- 1. There are at least two types of trail users: those who enjoy nature and an outdoor experience but may not be physically able, or personally disposed, to engage in strenuous exercise; and, those who seek out more remote or inaccessible natural areas which require greater stamina and effort to reach. For this reason, the trail system should include a wide range of improvements and levels of difficulty in order to accommodate the widest range of user groups.
- 2. It is recommended that the following potential foothill access points be designated in this Plan:
 - A. the east side of the circle behind the apartments at the mouth of Emigration Canyon; (outside Plan Area)
 - B. the ridge behind the "H Rock".
 - C. the "Trailhead Park" planned at the north end of Lakeline Drive;
 - D. access from Lakeline Drive up the small gully immediately south of Carrigan Canyon;
 - E. the open lot at the east side of the "T" intersection of Hyland Hills Drive and Lakeline Drive;
 - F. the canyon mouth south and east of the top of Benchmark Drive;
 - G. the base of the existing jeep road system at the south end of the Lake Bonneville Bench;
 - 3. A trail system should be developed which connects Foothill Access Points

"B" through "G" (see above) with Foothill Access Point "A" and to other destinations between, and in, Emigration Canyon and Parley's Canyon. These trails should connect public streets to ridge tops on public land and provide a primitive hiking amenity for those of moderate ability. This concept is consistent with the planning process conducted on behalf of the East Bench Community Council (EBCC) in the Spring and Summer of 1995 and reflects the EBCC position on the Bonneville Shoreline Trail adopted on July 31, 1995.

Issue: Parks

The current East Bench Master Plan identifies the need for a foothill park in the vicinity of the terminus of Lakeline Drive although it does not identify a specific site. The Salt Lake City Recreation Master Plan identifies the Plan Area as having a great deficit in parks and other recreational amenities. The City's Parks Division is in the process of designing a small playground on City-owned property occupied by the two reservoirs in Carrigan Canyon but this facility is not intended to meet the needs of all user groups in the neighborhood. Although there are presently open space and trail recreation opportunities available to the neighborhoods in the Plan Area, much of the property is in private ownership and the availability of this resource will diminish with additional development..

Recommendations:

- 1. A minimally developed "Trailhead Park" (drinking fountain, benches, trail sign) should be developed at Foothill Access Point "A".
- 2. A park area, possibly with limited play equipment in a large "sandbox" south of the current south terminus of Scenic Drive and accessible from the BST should be considered.
- 3. The potential for recreation use on the parcel immediately south of the Yesco Building, located at 2401 South Foothill Drive, should be evaluated.
- 4. An open space park and trail system, similar to the Ensign Peak Nature Park in the Capitol Hill Neighborhood, on undevelopable portions of the H Rock hillside should be considered.

Issue: Open Space Preservation Strategies

If open space is to be preserved in the foothills for future generations the City should be preparing now. Priorities for preservation need to be established along with strategies for acquisition (if necessary) and preservation of critical areas. Strategies may include: establishing conservation easements which allow land to remain in private ownership but insures long term open space preservation; donation to a land trust or other public and/or non-profit organization where the donor receives a tax benefit; sale of land to a land trust or other public and/or non-profit organization at a reduced value ("bargain sale") in which the donor would also receive a tax benefit; or, deed land to a land trust or other public and/or non-profit organization in fee simple at market value.

Recommendations:

1. Private land that is undevelopable should be designated as open space and conveyed to a land trust or similar public or private entity for perpetual preservation.

- 2. Conservation easements or donation of land should be sought by the City where needed to facilitate the completion of the BST and other trail systems designated in this Plan.
- 3. Revegetation of undevelopable land should be facilitated by the City to improve wildlife habitat, reduce illegal trash dumping, minimize erosion, and mitigate the loss of wildlife habitat due to previous development in the Plan Area.
- 4. Encourage other public or quasi-public entities to acquire and preserve open space lands.

Traffic / Circulation

Issue:

Foothill Drive

Foothill Drive is a State Highway and the primary arterial street serving Salt Lake City's east bench neighborhoods and the University district. Because of this, and because of it's connection with I-80 and I-215, Foothill Drive carries a very high volume of traffic. During peak hours, traffic tends to slow and "stack up" which encourages commuters to leave the arterial and enter the adjacent neighborhoods in search of alternative routes. This has created a significant adverse impact on the neighborhoods and especially on residents of Wasatch Drive.

- 1. It is of the highest priority to protect the neighborhood from encroachment of Foothill Drive traffic on the streets in the Plan area. In order to minimize the amount of commuter traffic leaving Foothill Drive and traveling through these on residential neighborhoods, the efficiency of Foothill Drive should be maximized as much as possible.
- 2. The City should actively encourage commuters to use alternative transportation (ride sharing. public transit, bike, light rail, etc.) in order reduce existing, and future increases in, traffic volumes.
- 3. The City should encourage the Utah Department of Transportation to evaluate the synchronization of traffic signals on Foothill Drive and make adjustments if necessary in order to improve traffic flow.
- 4. As part of the I-80 Major Investment Study (MIS), and subsequent reconstruction/improvement of I-80, UDOT should be encouraged to re-grade the northbound off-ramp to Foothill Drive in order to eliminate the high point in the road and improve site distance on Foothill Drive between the interchange and Thunderbird Drive.
- 5. Access to and from the commercial properties on the east side of Foothill Drive is dangerous for both north and south bound traffic due to high speeds, high volumes, and poor sight distance. The recommended Class I bike path which will traverse these properties may further impact safety. One of the goals of the redesign of Foothill as part of the I-80 MIS, as well as design of the bike path, should be to insure safe access for vehicles to and from the commercial properties and to minimize conflicts between vehicles and bicycles.

Over the years, the community has been supportive of a traffic signal at the intersection of Thunderbird Drive, Stringham Avenue, and Foothill Drive in order to improve overall access to and from the Plan Area. However, UDOT has indicated that this may not be possible since: (1) the intersection does not meet "warrants" (criteria that must be met in order to justify signalization), and; (2) excessive traffic speed combined with limited site distance for traffic northbound from I-80 may increase the potential for accidents at this intersection if traffic signals are installed.

Recommendations:

- 1. The re-grading of Foothill Drive (recommendation #4 for Foothill Drive above) will improve the chances for signalization of the Thunderbird Drive intersection with Foothill, improving both vehicular and pedestrian access to the Plan Area. Following re-grading of Foothill Drive, periodic evaluation of the intersection of Foothill Drive and Thunderbird Drive should be performed to determine if, or when, warrants are met for signalization.
- 2. Signalization of the Foothill Drive / Thunderbird Drive intersection should be a high priority. If signalization is not possible, the City should coordinate with UDOT to implement traffic calming measures to minimize pedestrian/ vehicle conflicts.

Issue: Commuter Cut-through Traffic

One of the most significant ways this community is negatively impacted is by commuter traffic leaving Foothill Drive and driving through the neighborhoods, primarily by way of Wasatch Drive, looking for an alternative route to the University of Utah and other northeast destinations. This traffic adds significant volume to Wasatch Drive and often exceeds posted speed limits. The City's Transportation Master Plan currently designates Wasatch Drive as a "collector street". A collector is defined as follows:

"Collector streets provide the connection between arterial and local streets. Collectors can be multi-lane, but are meant to carry less traffic at lower speeds and for shorter distances than arterials. They provide direct access to abutting property and carry a mix of local traffic and commuter traffic headed for nearby destinations."

Residents within the Plan Area feel that Wasatch Drive should be designated, and used, as a local street rather than a collector street and that measures should be implemented, such as traffic calming improvements, to discourage use by commuters not living in the neighborhood.

Traffic calming techniques are generally implemented to slow traffic. Slowing traffic may make some streets less convenient to use which will also have the effect of reducing traffic volume. The City has implemented a traffic calming program in order to evaluate and administer projects City-wide. Streets within the Plan Area which may be prime candidates for traffic calming projects include Wasatch Drive and Scenic Drive.

Recommendations:

1. Wasatch Drive should be reclassified from a "collector street" to a "local Street".

- 2. The highest priority for traffic calming improvements within the Plan Area should be given to Wasatch Drive.
- 3. Other improvements affecting Wasatch Drive may include restricting turning movements; restricting parking; converting the street, or connecting side streets, to one-way traffic; and/or, closure of selected segments of the street or connecting side streets.

Issue: 2100 South

The primary street providing controlled access to and from the Plan Area is 2100 South Street. However, even though there is a traffic signal at Foothill Drive, ingress and egress is still difficult at times of peak traffic.

Recommendations:

- 1. In order to reduce conflicts and provide more efficient north-bound right turn movements, the north side of 2100 South between Foothill and Wasatch Drive should be posted and enforced as "no parking".
- 2. The City should evaluate the east leg of the Foothill Drive intersection to determine if improvements could be made which would facilitate more efficient traffic movements in to and out of the Plan Area.

Issue: Public vs. Private Streets

It has become relatively common in recent years for developments in desirable locations to be proposed as "gated" communities with private streets. While this has been a successful marketing tool, locating an "exclusive" development within an existing neighborhood often creates friction between established residents and new ones. In foothill developments, private roads and gates may also deprive the general public of traditional access to public lands.

There is also concern that private streets are not required to meet the same construction and width standards as public streets which may lead to premature deterioration.

Recommendations:

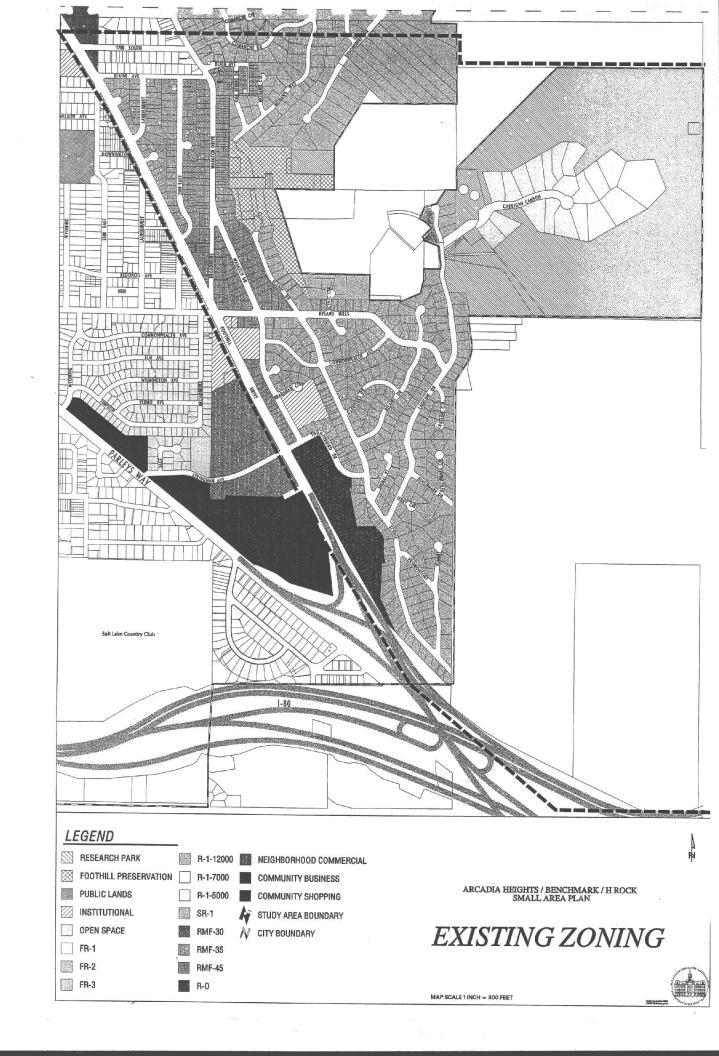
- 1. In order to better integrate new developments into existing neighborhoods and preserve public access to public lands, streets which are proposed as an element of new development should be dedicated as public streets and improved to City standards.
- 2. All streets should be designed recognizing the specific soil and geologic conditions of the site they are intended to serve and constructed to mitigate any potential adverse conditions.

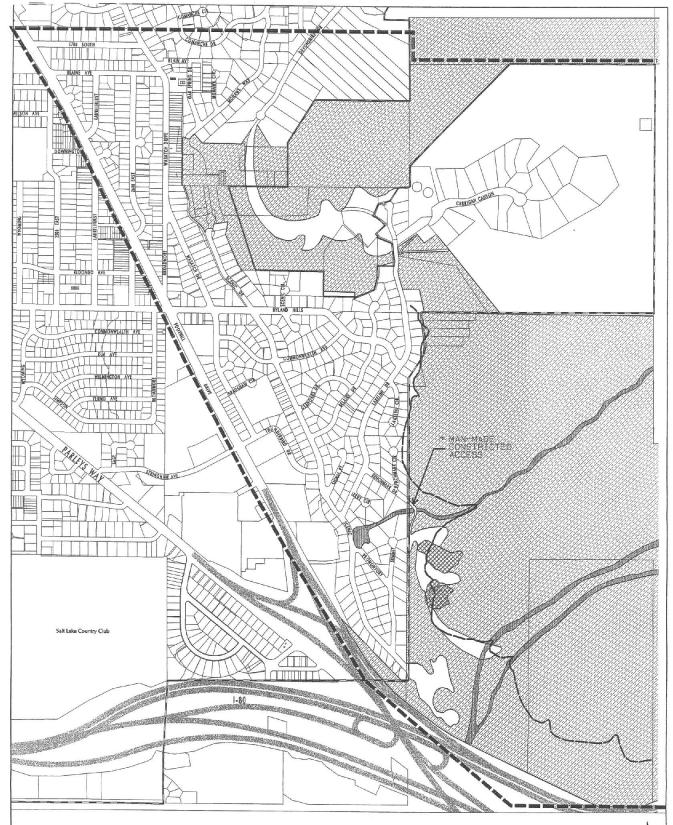
Issue: Separation of Vehicular & Pedestrian Traffic

A very high level of pedestrian use has been demonstrated throughout the neighborhoods within the study area. This use includes recreational walking and jogging, hiking in the foothills, and walking to church and schools. Pedestrian use within the community is desirable and should

be encouraged but may become hazardous if pedestrians are forced to share the same travel way with vehicles.

- 1. All new development should provide sidewalks and/or paths for pedestrian use which are separate from the vehicular travel way.
- 2. Traffic calming improvements should be developed with an emphasis on separation of automobile, bicycle, and pedestrian traffic.





LEGEND



PREDOMINANT SLOPES EXCEED 30%



PRESSURE ZONE (AFFECTS SOUTHERN PORTION OF STUDY AREA ONLY)



AREAS OF POTENTIAL ROCKFALL HAZARD
SSE IEXT FOR MITIGATION ALTERNATIVES;

AREAS OF POTENTIAL DEBRIS FLOW



STUDY AREA BOUNDARY



* "Existing roads/trails established prior to 1981 (the year slope restrictions were first adopted by the City) which traverse significant steep slopes may not serve as primary access for new development."

Note

This map is provided for conceptual illustration of existing conditions and is not intended to portray the recommendations of the plan.

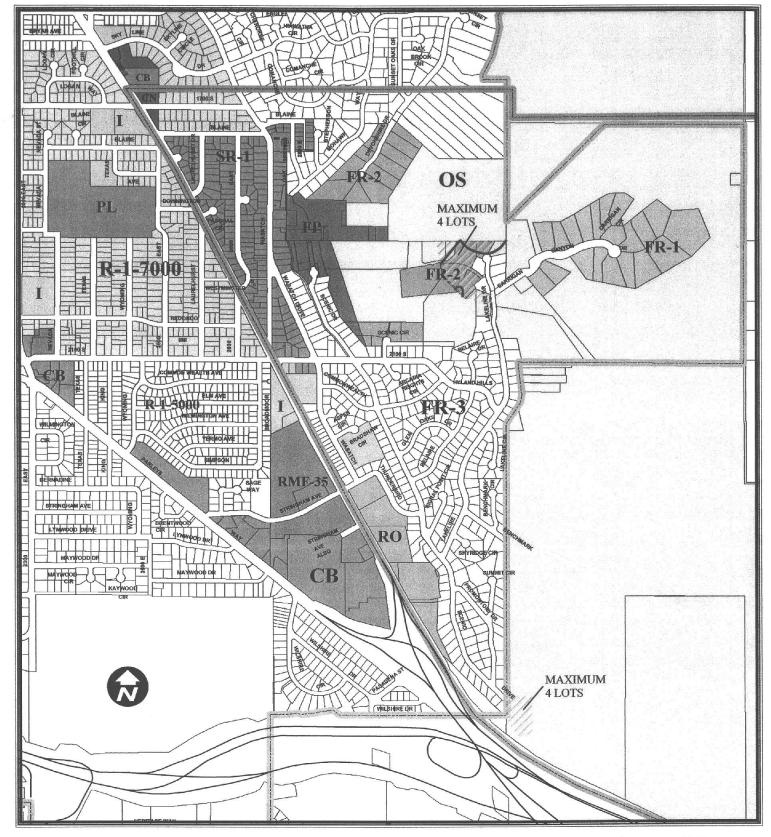
ARCADIA HEIGHTS / BENCHMARK / H ROCK SMALL AREA PLAN

DEVELOPMENT CONSTRAINTS

MAP SCALE 1 INCH = 300 FEET

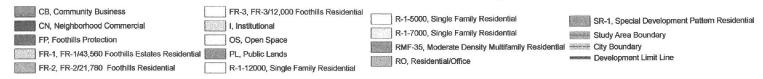
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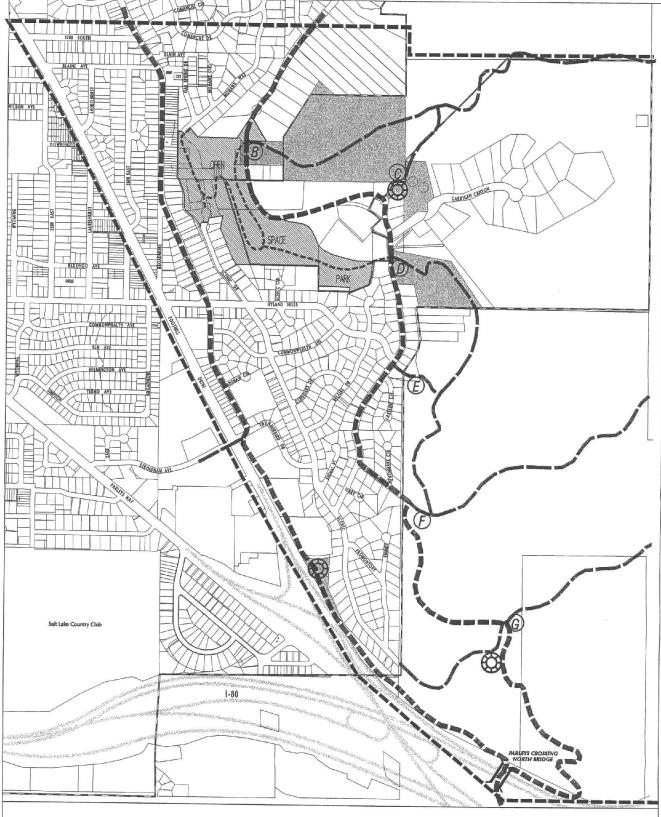




Arcadia Heights/Benchmark/H Rock Small Area Plan

Recommended Zoning





LEGEND



BONNEVILLE SHORELINE TRAIL SYSTEM



RECOMMENDED SECONDARY TRAILS PROVIDING FOOTHILL ACCESS



RECOMMENDED LOCAL TRAILS



FOOTHILL ACCESS POINTS

RECOMMENDED PARK SITES



ARCADIA HEIGHTS / BENCHMARK / H ROCK SMALL AREA PLAN

RECOMMENDED PARKS & TRAILS



