

CREATING A

Collegiate Village

FOR DUKE UNIVERSITY

CREATING A COLLEGIATE VILLAGE FOR

DUKE UNIVERSITY

TRADITIONAL NEIGHBORHOOD DEVELOPMENT PARTNERS, LLC

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FOREWORD



Duke is one of the world's great universities. Duke's East and West Campuses are among the nation's finest ensembles of academic architecture. Yet these two iconic campuses bookend the no-man's land of Central Campus, a placeless expanse that does not provide either campus with the setting and context of a traditional college town — despite the limited adjoining retail of Ninth Street. In what could be the heart of university life where town and gown meet, Central Campus is instead an auto-dominated, pedestrian-hostile desert of parking lots and traffic arterials, strewn with a hodge-podge of buildings that are too often of low quality. This all stands in painfully sharp contrast to the notable architectural and planning excellence of the East and West Campus cores.

Our proposal is to knit the East and West Campuses together with the fine-textured fabric of traditional mixed-used neighborhoods, such as those found in Princeton, Berkeley, Cambridge, Mass., Ann Arbor and Oxford, England. These new neighborhoods will all together comprise a village — a Duke Village. So important are such neighborhoods to university life that Oxford’s exalted intellectual life would historically not have existed without the pubs, coffee houses and tea shops along High Street where dons and students informally continue their scholarly conversations. Our vision is to fill the emptiness of Central Campus with four distinct neighborhoods, each with a mix of commercial, residential and institutional buildings. Each neighborhood will grow from and be defined by its particular existing geography, land use and settlement patterns. For example, the traditional character of West Campus, as seen in its earliest conceptual sketches, is that of a university set in a forest in the manner of its monastic predecessors. East Campus has the character of a university as a sanctuary in the comfortable domestic embrace of a bungalow neighborhood. Our design for Central Campus respects and reinforces the memorable characters of these two distinct places.

Linking these neighborhoods will be High Street, a pedestrian and bicycle friendly place of charm and delight to replace the current “car sewer” of Erwin Road. High Street connecting to and augmenting the commercial vitality of Ninth Street will include a rail station for the transit line anticipated along Durham Freeway. An architectural variety of commercial buildings studded periodically with handsome and imposing university buildings — in the manner of High Street in Oxford, England — could over time make this location one of the world’s most beautiful and delightful streets. On such a street, one would gladly walk or bike between the two campuses stopping along the way to pick up laundry, or a book, or share a drink with friends or faculty.

Duke Village, the missing college town, will be the final piece to realize a unified Duke University. It will be the part that makes the university whole.



The Great American Campus

America's college campuses are some of our nation's finest places. They are the direct heirs of a building tradition stretching back continuously to England's Middle Ages, to the Universities of Oxford and Cambridge.



Oxford University, England.



West Campus, Duke University.



University of Cambridge, England.



The Great American Campus



West Campus, Duke University.

Whether Gothic or Classical — the two great architectural languages of our civilization — venerable halls and quadrangles have been the cradle of scholarly life where architecture inspires ambition and the physical connections between disparate departments mimic the synapses of learning.



Holder Tower, Princeton University.



Yale University.



The Great American Campus



Student dorms at Harvard University.



East Campus, Duke University.



University of Virginia.

III The Greater Campus - An Extended Learning Community



Harvard Square, Harvard University.

But the experience of a university education does not stop at the campus gate; it rightly extends out into the surrounding community. Surely there is much to learn while chatting over books in a bookshop on Harvard Square, continuing a class conversation in a coffee house on Palmer Square, or “hoisting a pint” with a don in a pub on High Street, Oxford.



High Street, Oxford, England.



The Greater Campus – An Extended Learning Community

Duke doesn't have an adjacent interesting mixed-use neighborhood like those so beneficial to other great universities, except for the shops mostly on one side of two blocks along Ninth Street. For all intents and purposes, Duke is missing the full richness of this dimension of the college experience.



Erwin Road near Duke Hospitals and Duke University.



Existing Central Campus.

DUKE VILLAGE

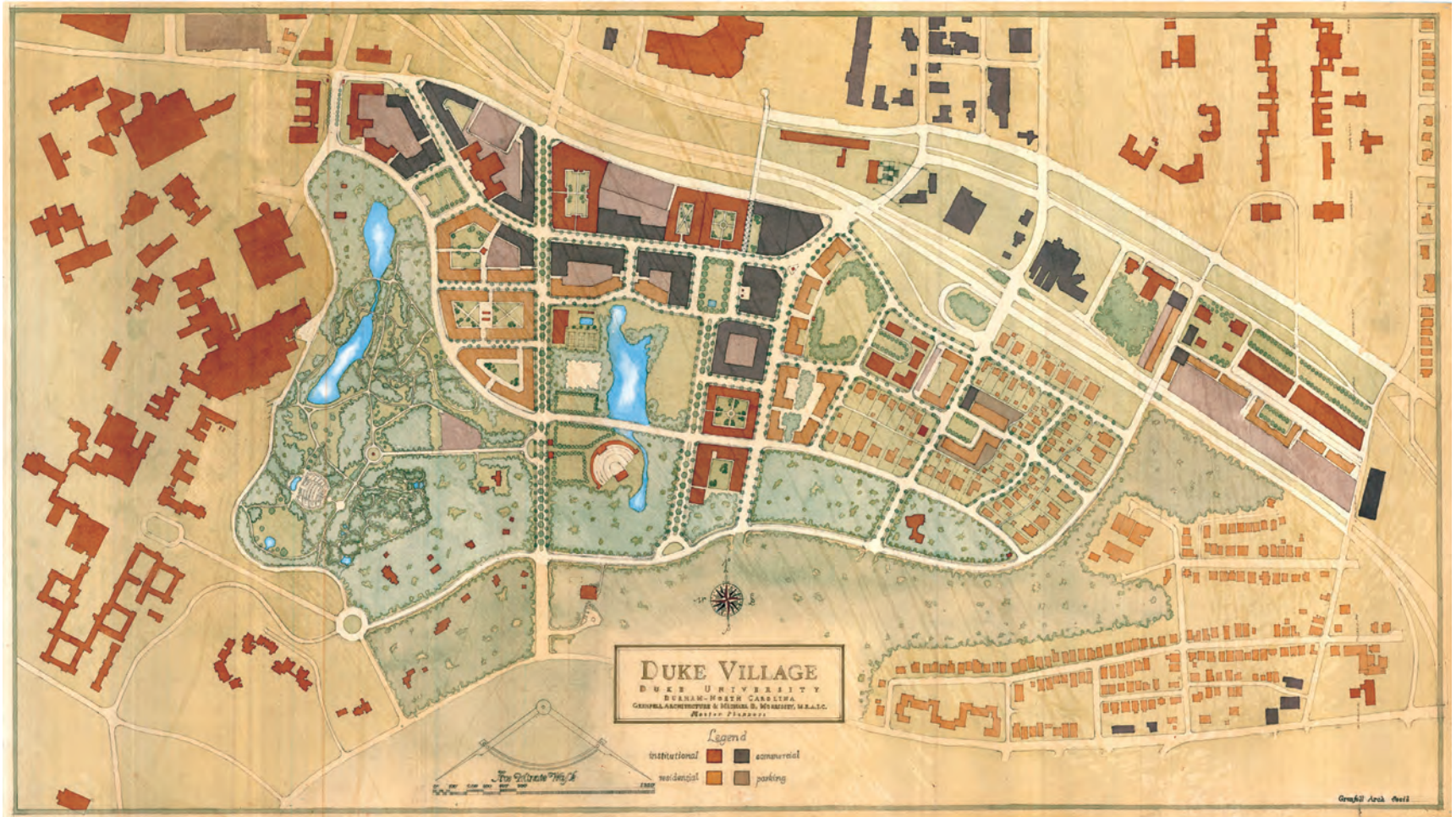
Nota bene:

The following work is a product of New Urbanist theory and practice. Our guide has been the principles summarized in the seminal New Urbanist document, The Charter of the New Urbanism (<http://www.cnu.org/charter>). Accordingly, many of these numbered principles are cited throughout this booklet to illustrate the specific principles upon which a particular design idea is based.



Duke Village

These principles that we will follow are summarized in the Charter of the New Urbanism — adopted by the members of the Congress for the New Urbanism in Charleston, South Carolina in 1996 — which we reference throughout this booklet. One such principle is that the natural, historically-verifiable building block of human settlement is the *Neighborhood*. Accordingly, we envision developing Central Campus as four distinct, nameable neighborhoods: High Street, the Garden District, Forest Slope, and the Arts District. We begin by creating traditional blocks via a rich network of varied street types and sizes.





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DUKE VILLAGE ★
DUKE UNIVERSITY
DURHAM-NORTH CAROLINA
GRENELL ARCHITECTURE & MICHAEL B. MORRISSEY, M.R.A.I.C.
Master Planners

*Note: This name and others throughout this booklet have been assigned for convenience and are provisional in nature only.



Duke Village

Charter, Principle Three: “Many activities of daily living should occur within walking distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips, and conserve energy.”



High Street Neighborhood.

Charter, Principle Five: “Where appropriate, new development contiguous to urban boundaries should be organized as neighborhoods and integrated with existing urban pattern.”



The Garden District Neighborhood.



Forest Slope Neighborhood.



The Arts District Neighborhood.

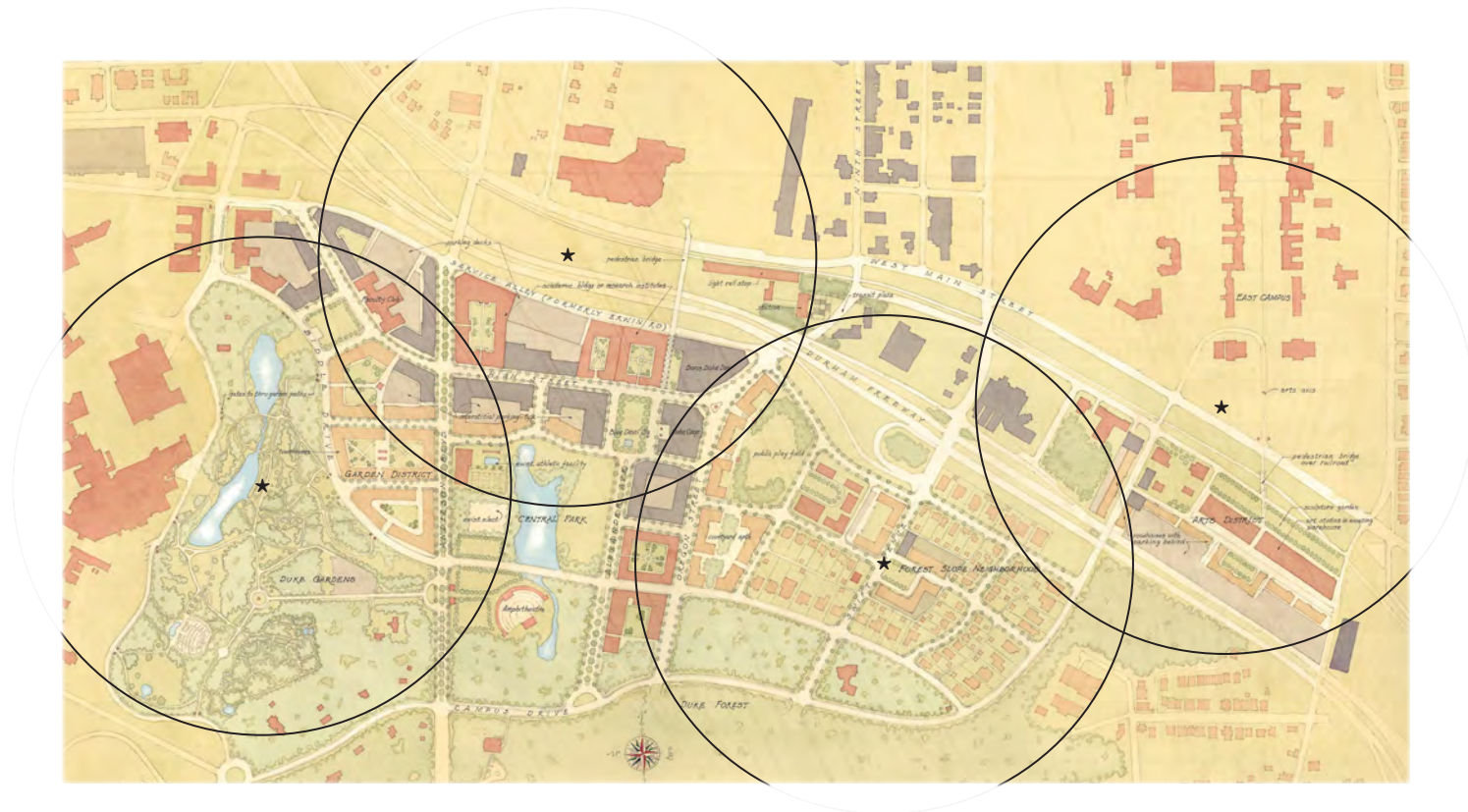
III The Neighborhood Commons

Each Neighborhood is derived from and defined by its existing conditions such as topography, natural features and relationships to built elements such as retail centers and the two campuses, as well as intended use patterns and street design.

Charter, Principle Six: “The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.”

Another key defining element of a neighborhood is size. Neighborhoods are typically no more than a five minute walk from center to edge, each with its particular mix of commercial, residential and institutional uses.

Charter, Principle Two: “Neighborhoods should be compact, pedestrian-friendly, and mixed use.”



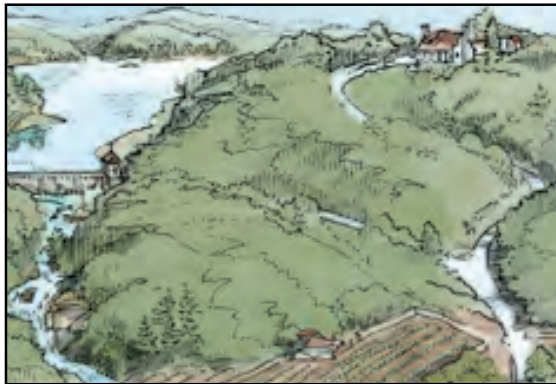
Each circle represents a five minute walk from center of neighborhood to edge of neighborhood.

||| The Urban-Rural Transect

The particular mix of features peculiar to each of our four neighborhoods was designed using a tool known as the Urban-Rural Transect. This conceptual tool was derived from the study of natural ecosystems, which like neighborhoods, are complex organisms containing a variety of parts that must work together. Naturalists use transects to describe the characteristics of ecosystems and the transitions from one ecosystem to another. Similarly, we have used transects to describe and design the characteristics peculiar to each of our neighborhoods and the transitions within these neighborhoods. Attending to characteristics through design gives places character, and makes them memorable.

Presented below: *American Transect*, drawn by James Wassell for Duany Plater-Zyberk & Company.

Rural Preserve
T1



Rural Reserve
T2



Suburban
T3



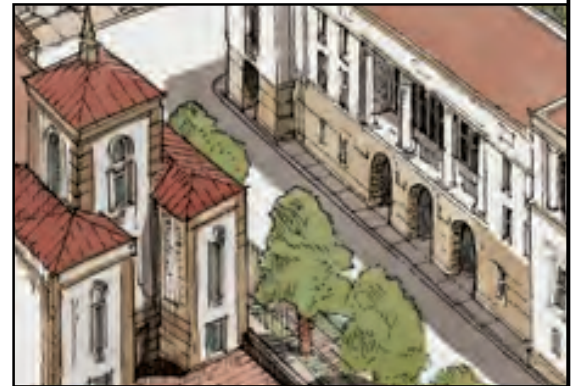
General Urban
T4



Urban Center
T5



Urban Core
T6



III The High Street Neighborhood



The High Street neighborhood's design redirects primary car and bicycle traffic and pedestrians into Central Campus, rather than around it, as is currently the case.

At the heart of our proposed village, we envision an east-west running High Street parallel to and south of Erwin Road. Lined with continuous walls of various buildings, those on the north will shelter High Street and Central Campus from the Durham Freeway. These buildings, in addition to several parking garages, will be served from the rear by Erwin Road which will now become a service alley.

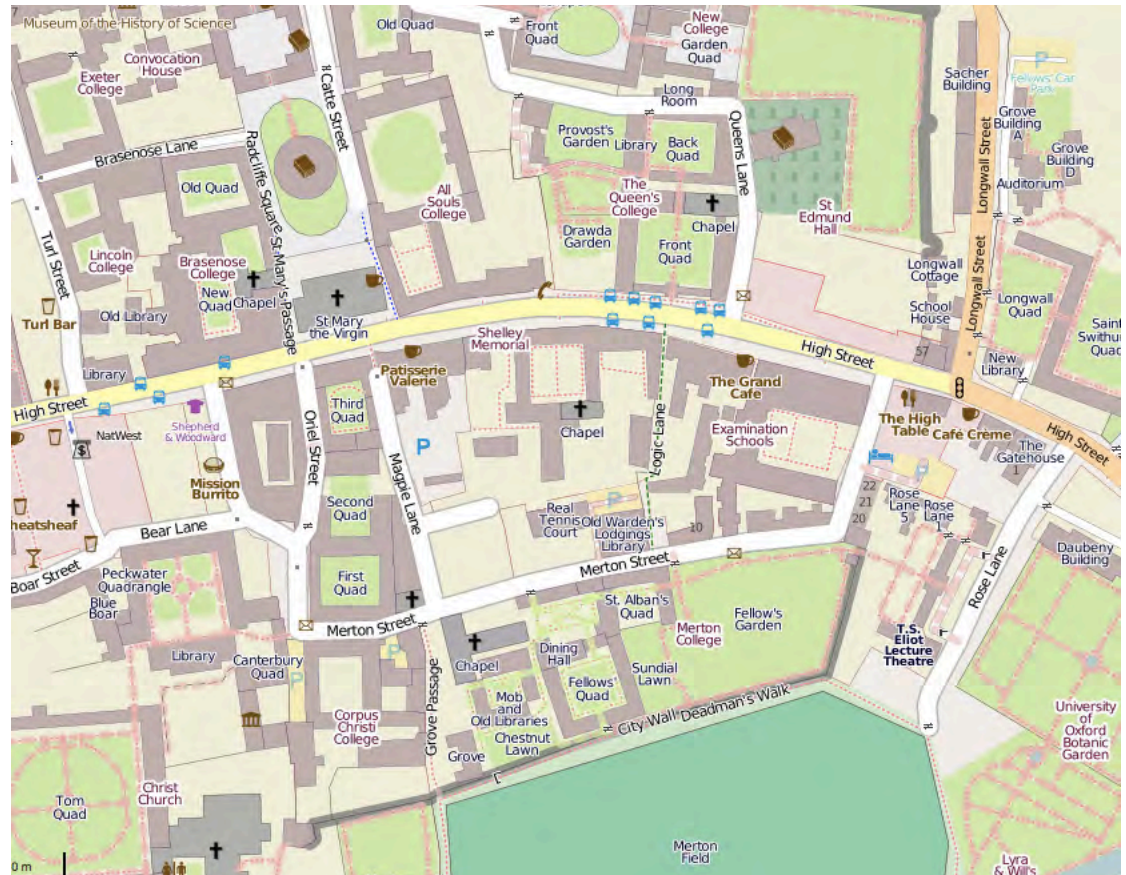
High Street is the traditional name in Britain for a village's primary retail street rather like the American Main Street. The chief street in Oxford, England is so named, which along with our proposed High Street for Duke, are both three-quarters of a mile in length, both run east-west in a great arc and figuratively terminate east and west with bridges. The sunlit orientation of the street's east-west course gives the University buildings visually favored south-facing facades and reserves the shaded north-facing side for glare-free shop windows. Furthermore, our High Street runs along the highest topographical elevations of the site.



The High Street Neighborhood

The street's name aside, we most want to emulate Oxford's felicitous mix of university buildings, shops, offices and residential units that comprise High Street. In the words of the respected architectural historian and author Nikolaus Pevsner, Oxford's High Street is "...one of the world's great streets. It has everything." For, as Thomas Sharpe, one of Britain's leading early twentieth century town planners noted, "not only is that street one of the world's great works of art, it is the backbone of university life."

The High Street we envision is a mix of high style (institutional) with vernacular (commercial), thus allowing a blend of high cost and low cost construction, as befits the budget. Moreover, the proposed mix of Gothic and Classical styles aesthetically unites the Gothic West Campus with the Classical East Campus, just as we unite them functionally.



High Street, Oxford, England.



The High Street Neighborhood

The artistic effect of Oxford's High Street that we will create over time is well described by Sharpe:

“Here, in creating a sort of art which in its informality of effect, its hospitality towards foreign elements, its capacity for ringing emotional changes – for dumping the Sublime alongside the Ordinary and making them both enjoy it – England has produced something different. Of this art the High Street at Oxford is the supreme architectural example. Not by any means knocking the stranger over with surprise tactics, it gains its end by a sort of casual splendor that only sinks in by degrees. But the victory is complete. There is dignity without formality; an aptitude for making lofty, even sublime, statements without a false or pompous manner; an amiable austerity; an immense variety of incident within a broad general effect. And this miracle of harmony-in-conflict is sustained in a series of well-punctuated installments for three-quarters of a mile on one side of a street curving broadly like a great river.”

- Sharp, Thomas. *Oxford Replanned*. London: Architectural Press, 1948.

||| The High Street Neighborhood

Duke's High Street — with bustling shop fronts studded with noble, architecturally impressive university buildings — has the makings of likewise being a great work of art. Great streets are defined by their buildings. To expedite the building-out of this street, we locate University buildings along High Street to provide the stimulus and structure for the commercial buildings, which will, like a coral reef, grow and symbiotically accrete between them over time. Uses for these institutional buildings might be for a new Faculty Club, for university administration offices that are currently being rented, or even for private research institutes. We see many of these institutional buildings as connecting to High Street via gated quadrangles, which like those of Oxford allow privacy even though visually open to the street in a neighborly way. Thus, the open space and scholarly sequestration that institutions have sought in the forest and suburban office parks could instead be had here in the bustling streets of Duke Village in close proximity to Durham's downtown.



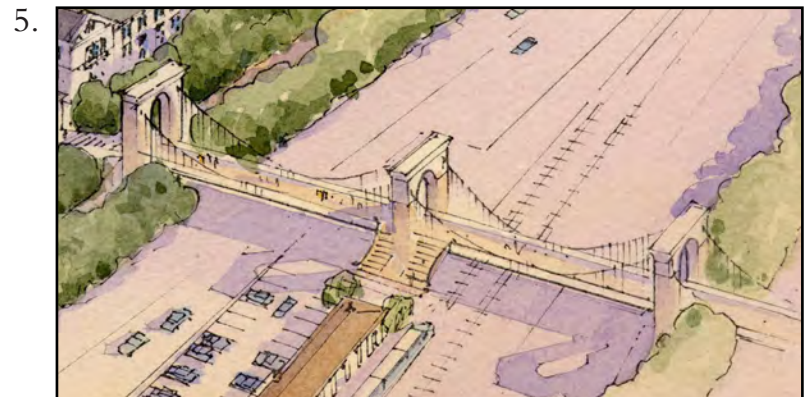
High Street, Oxford, England.



The High Street Neighborhood



Charter, Principle Fifteen: "Appropriate building densities and land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile."



III The High Street Neighborhood

The chief components of the High Street Neighborhood are described in the following paragraphs and keyed to the site plan on the following page.

1. One of the chief tasks of this neighborhood is to serve as a connector — to connect the Ninth Street retail node to Central Campus, to connect East and West Campuses, to connect the urban to the rural reserve. To facilitate this task High Street will be a richly multi-modal transit connector. It will offer town and gown bus service, safe bicycling, enjoyable walking and appropriately “traffic tamed” automobiles.

Charter, Principle Eight: “The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile.”

2. At the heart of the High Street Neighborhood, Blue Devil Square will break the street wall and offer a refreshing vista to the central park beyond. The life of the Duke Co-op and other surrounding retail will spill out into the Square, while a University building will crown its head and splendidly terminate the vista looking north up Alexander Street. Located midway between the two campuses, the square is the buckle in the belt of High Street, which cinches the two campuses together and will be the perfect spot for game day rallies and celebrations as well as daily meet-ups.
3. The High Street Neighborhood transect profile is a sharp one extending north-south from Urban Center (T-5) to rural reserve (T-2) along Campus Drive with only the rural

preserve of a central park between them. Such an abrupt change in transect is dramatic and memorable, rather like that of New York City’s Central Park’s relationship with its urban core surroundings.

4. A roadway-topped dam across an existing stream occupied ravine will create a two-acre pond for paddle boats, toy sailboats, ducks and Labradors to enjoy. The existing athletic facility will remain to help ornament the park. A terraced sylvan theater placed gently into the slope will host musical and theatrical events.

Charter, Principle Nineteen: “A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use.”

5. To connect High Street to Ninth Street retail, we propose embellishing the Durham Expressway overpass with a balustrade and sculpture and enlarging the existing island of retail between the overpass and West Main Street. We also propose including a transit stop there for future light rail and bus services. A pedestrian and bicycle suspension bridge spanning across the freeway will further connect High Street to the rest of Durham. Before connecting to the north sidewalk of High Street, this pedestrian and bicyclist way would be run alongside the courtyard garden of the proposed small hotel, thus offering people-watching for passersby and patrons alike.

The High Street Neighborhood





The Garden District Neighborhood



The Garden District Neighborhood, Central Campus.

The defining feature of the Garden District is the Duke Gardens, masterwork of renowned landscape architect Ellen Biddle Shipman. A gracefully curving parkway, Biddle Drive, bordered on the west by the gardens and on the east by handsome row houses, would help free the gardens from their unwarranted obscurity and present them more appropriately to the world.



Sarah P. Duke Gardens, Duke University.

III The Garden District Neighborhood

These townhomes, with their curved facades overlooking the gardens in the manner of Bath, England and the towers of West Campus rising above the trees would rank among the finest addresses in North Carolina. But most importantly the beauty of Duke Gardens would now be properly framed, as beauty always should be.

Charter, Principle Eighteen: "A range of parks, from tot-lots and village greens to ballfields and community gardens, should be distributed within neighborhoods. Conservation areas and open lands should be used to define and connect different neighborhoods and districts."



Royal Crescent in Bath, England.

III The Garden District Neighborhood

At the upper end of the neighborhood is a terraced square, cascading from High Street down to Duke Gardens, that would be enlivened by retail on its north side and adorned with a new Faculty Club on its east side. Built of noble materials, bathed in warm southwestern light, the club would command a view down the square, across the gardens and off to the spires of West Campus.



Charter, Principle Twenty-Five: "Civic buildings and public gathering places require important sites to reinforce community identity and the culture of democracy. They deserve distinctive form, because their role is different from that of other buildings and places that constitute the fabric of the city."



Current suburban-style entrance to Duke Gardens on Anderson Street. Gardens themselves are scarcely visible from roadway.



Brock Street, Bath, England (*Great Streets* by Allan B. Jacobs)
Four new Garden District streets would have vistas terminating in Duke Gardens in a similar fashion.



The Garden District Neighborhood



Transect from the higher-elevation High Street to Duke Gardens.

In the Garden District, another dramatic transect zone contrast is established as by the transitions from Urban Center (T-5) to Rural Preserve (T-1). Such an abrupt yet seamless transition is found at some of the best and most utilized parks in the world.



Bedford Square, London, England.



Forest Slope Neighborhood



The Forest Slope Neighborhood, Central Campus.

On the slope leading toward the southeast of the High Street ridge, Forest Slope is predominantly a residential neighborhood modeled after Durham’s most livable neighborhoods such as Trinity Park and Trinity Heights, similarly offering a wide range of residential types and price levels.

Charter, Principle Thirteen: “Within neighborhoods, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community.”

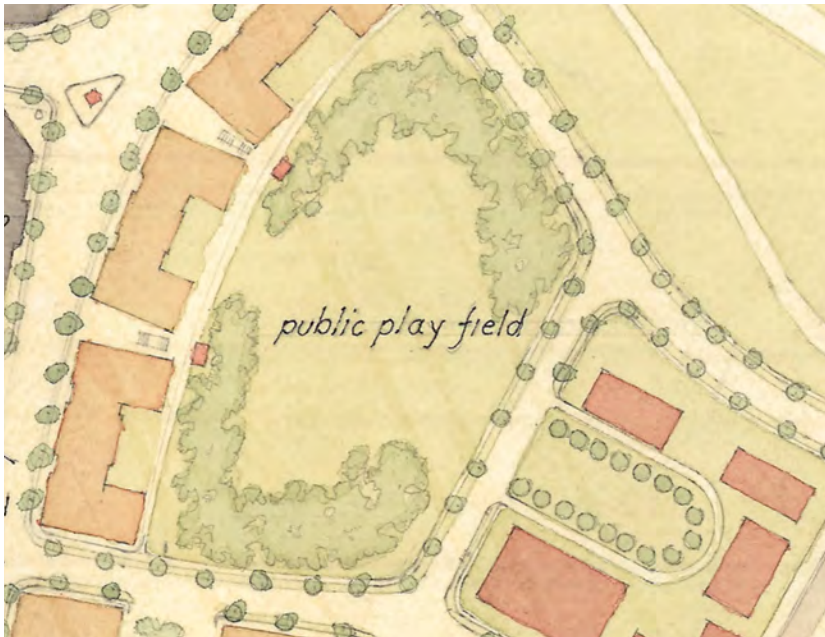
As an ideal neighborhood, Forest Slope will also have a small number of institutional and commercial spaces. The institutional — such as a neighborhood elementary school — could use the adjacent park for recreation, while neighborhood residents could use the school’s facilities for community meetings. Neighborhood commercial resources might include a small grocery or convenience store, with offices above, located on and animating a neighborhood square fronting Swift Avenue.

Charter, Principle Sixteen: “Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them.”



Forest Slope Neighborhood

Charter, Principle Twelve: “Many activities of daily living should occur within walking distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips and conserve energy.”



Proposed elementary school site adjacent to a public recreation area.



Neighborhood Retail (purple) adjacent Rowhouse Square.



Forest Slope Neighborhood



Trinity Heights bungalow built 2002.



Trinity Heights bungalow built c. 1920.

In addition to single-family homes, we envision row houses lining the square on Swift Avenue and a smattering of four- to eight-unit apartment buildings elsewhere. The latter, in particular, would offer affordable rentals as a comfortable part of a neighborhood of predominately single-family houses.

We recommend that the detached single-family houses be Arts and Crafts bungalows for the following reasons:

1. This house design characteristically has large front porches. Good porches make for neighborly streets.
2. Bungalows are simple and builderly; therefore, they are also economical to construct.
3. They are the predominate style in the adjacent neighborhoods and are well represented in most of Durham's best neighborhoods. Thus, they continue a long line of architectural excellence in the community.

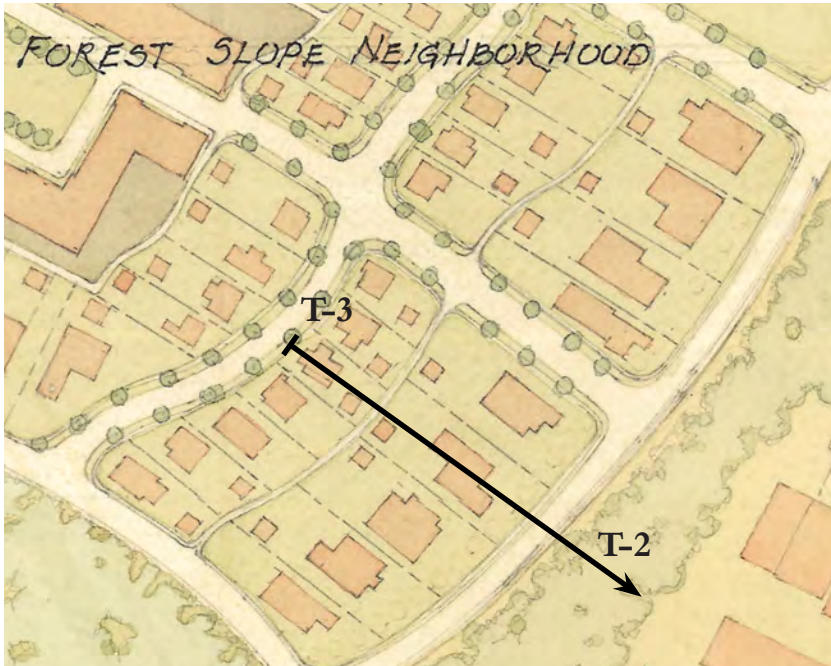
Continuing the custom of earlier Durham blocks, detached garages on rear alleys will keep cars tastefully off the street.

Charter, Principle Twenty-Four: "Architecture and landscape design should grow from local climate, topography, history and building practice."

Forest Slope Neighborhood

On the southeast edge of the neighborhood, bungalows nestled beneath the existing mature tree canopy face Campus Drive. These houses furnish “eyes on the street” to this section of the road, enhancing security by effectively shortening the uninhabited length of Campus Drive.

Forest Slope presents the most gentle transition between transect zones of all our neighborhoods. Moving from Neighborhood General (T-3) to the Rural Reserve component (T-2), the Forest Slope neighborhood blends comfortably with its surroundings.



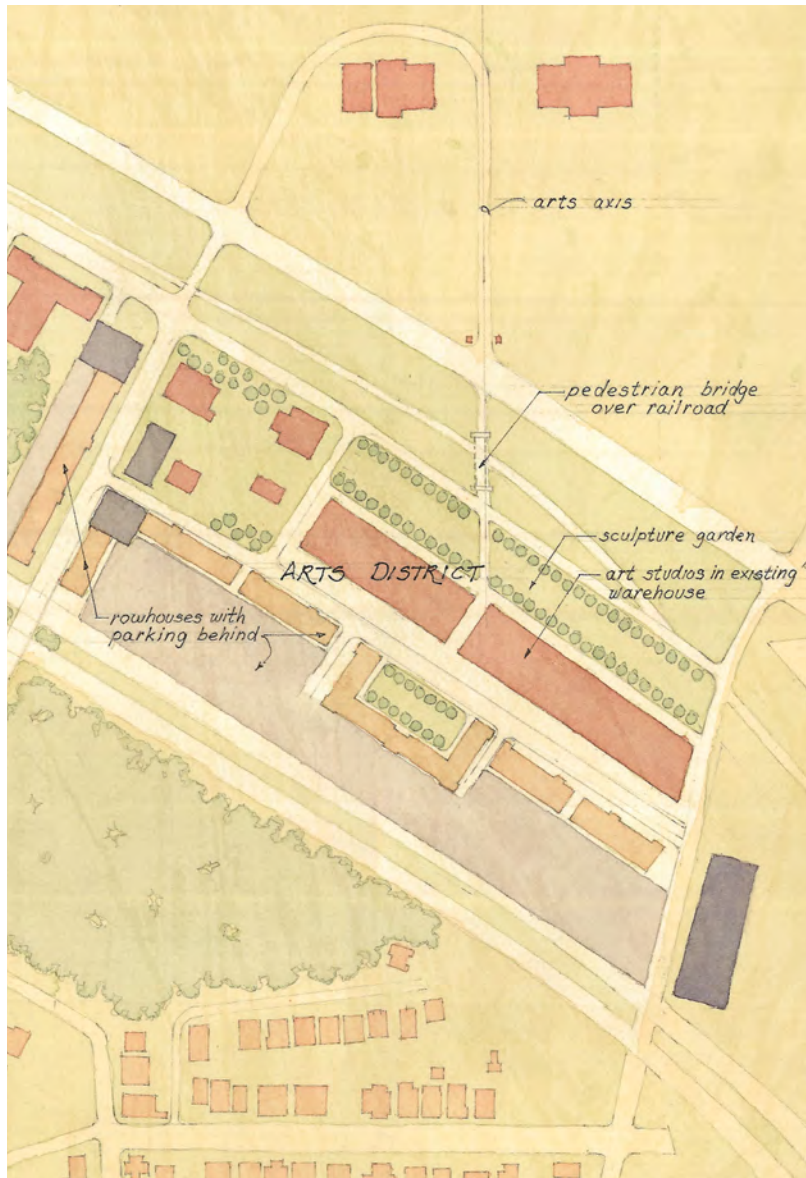
Bungalows nestled in amongst tree-lined street in Duke Village.



Existing stretch along Campus Drive.



The Arts District Neighborhood



The Arts District Neighborhood, Central Campus.

Terminating the east end of Campus Drive and adjacent to Forest Slope, we propose a neighborhood named the Arts District. Here the University has already begun a brilliant program of adaptively reusing a large 100-year old warehouse and other legacy buildings. Because of the area's close proximity to East Campus, the more fine arts-oriented of Duke's two campuses, this would be a good location for artists' studios and performance spaces.

Charter, Principle Twenty-Seven: "Preservation and renewal of historic buildings, districts, and landscapes affirm the continuity and evolution of urban society."



Recently renovated steam plant in the proposed Arts District.

III The Arts District Neighborhood

We propose adding a mix of commercial and residential uses among the adaptively re-used buildings thereby creating a transect transition along Campus Drive from the T-3, T-1 of Forest Slope, to the Urban General (T-4) of the Arts District. In so doing, these re-purposed industrial relics will no longer stand marooned in the landscape, but will instead be woven into a new urban fabric which will in turn be made visually arresting and memorable by the monumental character and scale of these buildings.



Typical street life in “artsy neighborhoods” Asheville, North Carolina.

The neighborhood commercial uses might take the form of an art supply store, artsy coffee house or bohemian restaurant and bar. The characteristically lively late hours of such an arts community would enhance night security at this end of Campus Drive and its underpass. Row houses are positioned to create walls to define streets and calm traffic along Campus Drive and Maxwell Avenue. Moreover, these walls would buffer traffic noise from the abutting Durham Freeway. This residential component might well be roughly finished “loft space,” to keep them affordable and to deliver a fashionable bohemian chic ambience.



Narrow streets with busy sidewalks in Asheville, North Carolina.



The Arts District Neighborhood



The arts axis.

To better knit this neighborhood to East Campus, we propose a pedestrian and bicycle bridge on the East Campus central axis to span the existing railroad tracks between them. A bay of the old tobacco warehouses could be opened on the ground level to create a covered passage to a neighborhood square in which the axis could terminate. In addition to this square, we propose a large front lawn on the other side of the warehouse for recreation and use as a sculpture garden.



New ground level passageway through building to residential row houses to the South. The location is marked by an asterisk (*) in the plan to the left.

III In Conclusion

Numerous visions for the Central Campus have been put forward in recent years. That all have failed to inspire – and languish in various degrees of inaction – supports our contention that all are fundamentally flawed, each in its own way. None appear to appreciate the importance of the street or to understand the complex variety of street types necessary for the successful urbanism called for on Central Campus. This is a crucial deficiency, for as Jane Jacobs rightly began her magisterial *The Death and Life of Great American Cities*, arguably the most important book about cities published in the past hundred years:

“Streets and their sidewalks, the main public places of the city, are its most vital organs.”

None of the past proposals appears to understand the urban transect or how to use it as a tool for preserving and creating memorable places of distinct character. The various plans show assorted buildings strewn about willy-nilly, as if Central Campus were some architecture playground, and the buildings like so many playthings unruly children have capriciously scattered about.

Some draw on planning ideas from early in the last century, seemingly oblivious to the fact that those ideas, such as “towers-in-the-park,” have proven to be failures and are being demolished worldwide. The dynamiting of the not two decade old Pruitt-Igoe structure is perhaps the most infamous example.



Pruitt-Igoe, St. Louis , MO (1954-1971).



Soon-to-be-demolished 17 year old Cal Polytechnic Pamona tower in a park.



In Conclusion

Mid- to late-twentieth century campus planning theory has frequently failed to acknowledge either the importance of human scale spaces or the vitality of street level interactions. It is our perception that such design has frustrated the successful development of Central Campus for nearly fifty years.

Understanding of the critical difference between facilities planning and space planning is one key to attracting the brightest faculty and students. Thus, we submit this proposal, out of affection for Duke and Durham, in the hope and belief that the University will fully recognize the opportunity to create a place worthy of great praise.





In Conclusion

What we propose is not another experiment. It is a plan originating in our intimate knowledge of Duke and Durham, and deeply rooted in the ageless, tried and proven principles of thousands of years of successful urbanism. Our village, with its four distinct neighborhoods, each based on traditional urban principles, would be beautiful, functional, durable and sustainable as traditional places always are. The value brought to this currently underutilized real estate would generate a steady flow of revenue for Duke for generations to come, but the greatest wealth to flow from this would be the enrichment this village would bring to the university life of Duke. It is a vision that will take many years to build out. Yet in a real sense, like all living places, it will never stop being built. But with the work begun well, our descendants can add to the work, and not be compelled to tear down and start over as is often the case with so many recent examples. Armed with clear vision and persistent will, Duke University can proceed in the spirit that President John F. Kennedy expressed in his inaugural address:

“All this will not be finished in the first hundred days. Nor will it be finished in the first thousand days, nor in the life of this administration, nor even perhaps in our lifetime on this planet. But let us begin.”





Key to Development Program: Bird's-Eye View





Key to Development Program: Plan View



Nota Bene: Some of the buildings catalogued in the following pages, particularly in the Arts District Neighborhood, are not shown here strictly because they are not captured in the drawing.

Development Program – Inventory of Structures

Convertible and Multiple-Use Structures

Building	Use	Number of Stories	Total Square Feet	Type of Construction (see key)	Construction Cost Estimate 2012 Dollars (approx. thousands)
C1	Commerce	3	71,400	2	14,280
C2	Alumni Inn	3	111,900	2	22,380
C3	Commerce	3	106,500	2	21,300
C4	Corporate Center	3	150,975	2	30,195
C5	Cinema Complex	3	73,089	3	13,156
C6	Service Center	2	84,800	3	15,264
C7	Scholars' Inn	3	140,085	3	25,215
C8	Entrance Commercial Sites	3.5	198,713	1	51,665
C9	Town Center Hotel	4	199,000	1	51,740
C10	Village Center	3	90,000	1	23,400
C11	Market Place and Co-op	4	214,310	1	55,720
C12	Town Center Commercial Sites	4	266,000	2	53,200
C13	Faculty Club	3	15,555	2	3,111
C14	Commerce	4	32,000	3	5,760
C15	Commerce	4	22,000	3	3,960
C16	Commerce	4	28,800	3	5,184
<i>Totals</i>			<i>1,805,127</i>		<i>\$395,530</i>

Key:

Type of construction (total construction cost per square foot)

- 1 - All masonry and steel with significant stone and/or brick detailing (\$260)
- 2 - All masonry and steel with less complex detailing (\$200)
- 3 - Standard commercial construction (\$180)
- 4 - Standard residential construction (\$160)
- 5 - Standard surface parking lot (\$2,000 per 200 sq. ft. parking space)
- 6 - Standard parking garage (\$12,000 per 200 sq. ft. parking space)



Development Program – Inventory of Structures

Institutional, Academic, and Research Structures

Building	Use	Number of Stories	Total Square Feet	Type of Construction (see key)	Construction Cost Estimate 2012 Dollars (approx. thousands)
I1	Research Centers and Institutes	3	90,300	2	18,060
I2	Research Centers and Institutes	3	45,450	2	9,090
I3	Research Centers and Institutes	3	113,400	2	22,680
I4	Kiosk-Shelter	1	900	3	162
I5	Sidewalk Follies	1	450	3	81
I6	Sidewalk Follies	1	450	3	81
I7	Kiosk-Shelter	2	183,450	3	33,021
I8	Gym	2	33,200	3	5,976
I9	Athletic Facility	2	1,900	3	342
I10	Kiosk-Shelter	1	900	3	162
I11	Ticket Sales	2	1,800	3	324
I12	Amphitheater	1	6,100	2	1,220
I13	Research Centers and Institutes	3	135,900	2	27,180
I14	Lyceum/Belvedere	3.5	150,238	2	30,047
I15	Welcome Center	2	300	3	54
I16	Welcome Center	2	300	3	54
I17	Flexible Classroom Space	3	145,500	3	26,190
I18	Flexible Classroom Space	3	148,125	3	26,662
I19	Flexible Classroom Space	3	21,600	3	3,888
I20	Kiosk-Shelter	1	225	3	40
I21	Kiosk-Shelter	1	200	3	36
I22	Kiosk-Shelter	1	200	3	36

(continued on the following page)



Development Program – Inventory of Structures

Institutional, Academic, and Research Structures *(continued)*

I23	Flexible Classroom Space	3	15,000	3	2,700
I24	Flexible Classroom Space	3	37,800	3	6,804
I25	Flexible Classroom Space	3	12,000	3	2,160
I26	Flexible Classroom Space	3	16,200	3	2,916
I27	Flexible Classroom Space	3	24,000	3	4,320
I28	Flexible Classroom Space	3	6,000	3	1,080
I29	Freeman Center for Jewish Life	<i>existing</i>			
I30	Research Centers and Institutes	3	1,800	3	324
I31	Faculty and Staff Offices	2	12,200	3	2,196
I32	Faculty and Staff Offices	2	18,300	3	3,294
I33	Faculty and Staff Offices	2	13,400	3	2,412
I34	Faculty and Staff Offices	2	5,000	3	900
I35	Faculty and Staff Offices	2	12,850	3	2,313
I36	Faculty and Staff Offices	2	3,300	3	594
I37	Faculty and Staff Offices	2	72,600	3	13,068
I38	Faculty and Staff Offices	2	108,350	3	19,503
<i>Totals</i>			<i>1,470,288</i>		<i>\$269,970</i>



Development Program – Inventory of Structures

Parking Structures and Lots

Building	Use	Number of Stories	Total Square Feet	Type of Construction (see key)	Construction Cost Estimate 2012 Dollars (approx. thousands)
P1	Surface Parking Lot	1	88,925	5	889
P2	Parking Garage	6	277,500	6	16,650
P3	Surface Parking Lot	1	47,655	5	476
P4	Surface Parking Lot	1	25,675	5	256
P5	Parking Garage	6	378,000	6	22,680
P6	Surface Parking Lot	1	42,125	5	421
P7	Surface Parking Lot	1	31,350	5	313
P8	Surface Parking Lot	1	11,025	5	110
P9	Surface Parking Lot	1	28,900	5	289
P10	Surface Parking Lot	1	8,400	5	84
P11	Surface Parking Lot	1	19,525	5	195
P12	Surface Parking Lot	1	14,800	5	148
P13	Surface Parking Lot	1	20,000	5	200
P14	Surface Parking Lot	1	206,425	5	2,064
<i>Totals</i>			<i>1,200,305</i>		<i>\$44,775</i>

(continued on the following page)

Key to Development Program – Inventory of Structures

Residential Buildings

Building	Use	Number of Stories	Total Square Feet	Type of Construction (see key)	Construction Cost Estimate 2012 Dollars (approx. thousands)
R1	Apartments	4	156,800	4	25,088
R2	Apartments	4	98,000	4	15,680
R3	Village Center Apartments	4	73,600	2	14,720
R4	Apartments	4	100,416	4	16,066
R5	Village Center Apartments	4	149,600	2	29,920
R6	Apartments	4	123,200	4	19,712
R7	Village Center Apartments	4	102,560	2	20,512
R8	Residential Blocks	2	62,626	4	10,020
R9	Flex Houses	3	47,400	4	7,584
R10	Flex Houses and Condominiums	3	55,800	4	8,928
R11	Flex Houses and Condominiums	3	54,000	4	8,640
R12	Flex Houses and Condominiums	3	60,000	4	9,600
R13	Residential Blocks	2	42,600	4	6,816
R14	Residential Blocks	2	24,600	4	3,936
R15	Residential Blocks	2	36,000	4	5,760
R16	Residential Blocks	2	23,000	4	3,680
R17	Faculty and Staff Condominiums	3	37,500	4	6,000
R18	Faculty and Staff Condominiums	3	37,500	4	6,000
R19	Faculty and Staff Condominiums	3	48,300	4	7,728
R20	Faculty and Staff Condominiums	3	64,500	4	10,320
R21	Residential Blocks	2	40,750	4	6,520
R22	Residential Blocks	2	12,500	4	2,000
R23	Residential Blocks	2	16,000	4	2,560
R24	Residential Blocks	2	20,000	4	3,200
R25	Residential Blocks	2	25,600	4	4,096
R26	Residential Blocks	2	6,000	4	960
R27	Residential Blocks	2	8,400	4	1,344
<i>Totals</i>			<i>1,527,252</i>		<i>\$257,390</i>

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