ABSTRACT

Title of Document: PREPARING FOR A POST WAL-MART WORLD,

AN OPPORTUNITY FOR HOUSING

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The changing nature of Wal-Mart from a traditional dry goods retailer into an integrated, global supply chain and Wal-Mart's expansion into urban markets necessitate new architectural and urban strategies. Even as Wal-Mart continues to build the simple big box on a large scale, the pressure to change is growing, both from the outside and from within the company.

As Wal-Mart seeks to more nimbly respond to these pressures and give form to change, my thesis proposition is that a new type of Wal-Mart can emerge, one which contributes to a vibrant urban fabric, respects its neighbors, and ultimately leaves a stronger community. The city demands citizenship of corporations, and may catalyze the evolution of Wal-Mart from a mere global corporate entity to an institution enfranchised in the health of the community of which it is a part.

PREPARING FOR A POST WAL-MART WORLD, AN OPPORTUNITY FOR HOUSING

Ву

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Preface

"Wal-Mart Stores Inc. is close to a deal to build a store in the District, a transaction that would bring the world's largest -- and perhaps most controversial -- retailer into the nation's capital. The Bentonville, Ark.-based chain is negotiating with developers to build a 100,000-square-foot store at the Rhode Island Place shopping center in the Brentwood neighborhood of Northeast Washington. Proponents said the discount chain would create hundreds of jobs, generate higher tax revenue and provide residents with lower-priced merchandise that they already purchase outside the city. Critics, however, assail the chain, saying it pays low wages, hobbles its unionized competitors and destroys small businesses."

Wal-Mart in Talks to Build D.C. Store Washington Post Wednesday, August 11, 2004

"D.C. Mayor Anthony A. Williams said he would not allow federal housing authorities to evict 211 families from a run-down housing complex 10 blocks north of the U.S. Capitol, but it was not clear yesterday what the city could do to block the plan."

Mayor Vows to Block Ouster of 211 Families Washington Post Friday, April 28, 2006

Dedication

I would like to dedicate this work to all the people around me who have inspired me to be better than I was yesterday, to look beyond the bounds of self, and see greater possibilities for this world.

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Chapter 1
Introduction



Fifty years ago, H Street in Northeast Washington, DC was one of the busiest commercial corridors in the city. On what was pasture and fields a century before, now hosted dress shops, restaurants, law offices, shoe stores and grocers, everything the thousands of shoppers from the surrounding neighborhoods of Capitol Hill, Trinidad and beyond could need. The businesses that defined that street are all long gone, the victims of changing business patterns, shifting shopping habits, social unrest, and demographic change. In a mere 50 years, the buildings which did not retain their usefulness, those which were too large to find a new caretaker, like the Old Sears, or too small, like the alley housing, were torn down and swept away. What survived were the commercial buildings versatile enough to adapt or precious enough to maintain, and the row houses that would shelter generations. The lesson of this street is that we must build not for 5 years of prosperity and life, but for 50.

We hear that things aren't done that way anymore, that clients are only interested in the short term, that our cities are at the mercy of corporations that can shop around for the most favorable terms, and in practice this is largely true. It is true because advocates for the city fail to present a vision of the city as it could be, by politicians who rally behind contributions before their community, and architects who fail to recognize that their most important client is the city.

What I present here is a transformative opportunity for an company that will do much to shape the American landscape in the next years, and a new vision for retail development in the city, neither of which are supported by the present political and economic context. The hope is to raise a set of questions about our priorities today, and our obligations to the future.

One place to start thinking about the question of Wal-Mart in the city is back on H Street, not 50 years in the past, but fifty years in the future. The world will be a much different place, and will have experienced the same revolutionary and evolutionary changes which have roiled the previous half century. Again all the old businesses will be

gone, but the neighborhood will look much the same. The small commercial spaces and row houses will probably retain their value to the community, because there will always be the need for solidly built homes and flexible space for small enterprise. This should not be a controvertial assumption. Will Wal-Mart still be around in 50 years? The argument layed out below would suggest not, at least not as we know it today. The company has been in operation for only 40 years, and in that time it has experienced dramatic changes in how it does business.

Retailers such as Wal-Mart shift formats (store size and product mix) about once a decade on average, and are only too eager to do so if sales per store can be increased. What persists is the supply chain, which we will see is the core of Wal-mart's operation. Where that chain ends is in the American home, and if there is a more cost-effective and profitable way to get milk, Tide, shower curtains, tires, toys, jewellry, dog food, DVD's, beef jerky, lawn ornaments, batteries, bra's, shoes, coco puffs, and lamps into your home than a Supercenter store, Wal-Mart will find it. They will try smaller stores, larger stores, and virtual stores, and leave behind empty stores. Each empty space is a burden upon the community, and a lost opportunity.

The company will inevitably evolve away from the way it does business today, and I believe this obligates Wal-Mart and the communities it is expanding into to plan for this Post Wal-Mart world. What would remain of a big box store in fifty years? Nothing. In their place we could build a development which would continue to build social capital even after the current retail market has shifted out from under Wal-Mart. We will explore the unprecedented economic strength as well as the particular vulnerabilities of Wal-Mart, qualities which add up to a unique opportunity to harness corporate capacity for public good.

Chapter 2
The Wal-Mart Way



The physical landscape is a reflection the economic system which shapes it. Economics describe how human activity is organized; architecture gives form to that organization, from there, as Churchill said, our buildings are free to shape us. In this I do not advocate a purely functionalist view of building: that would invalidate the irrational, the artistic, and the beautiful. No, in fact architecture should inform our understanding of the economic world, and demonstrate that it too is populated by irrational actors. Wal-Mart represents perhaps the most vivid illustration of the distortions created by irrational markets. An examination of this giant reveals what happens when the defense of one company's unassailable right to market share trumps the rights of labor, the imperative to create good communities, and the stability of our economy as a whole. The beauty of markets though, is that distortions are always corrected, either by competition, regulation, or evolution. We will be speculating upon one possible path for evolution, one driven by a new role for Wal-Mart as a partner in the sustainable growth of communities. First it is necessary to examine this widely admired and broadly reviled company.

In 1953, Charles Wilson, the chairman of GM, was being confirmed by the Senate as Eisenhower's Defense Secretary when he was questioned whether he would be able to effectively distinguish between the interests of the United States and those of General Motors, in which he still had a financial stake. His famous reply, that "what is good for America is good for General Motors," underscored the importance of GM to the American economy, which at the time accounted for more than 2% of GNP¹. Few companies have had such a pre-eminent role in the American economy, and Wal-Mart is certainly one of them.

Wal-Mart is the world's largest company, and as such has acquired a

presence in the collective conscious that transcends the simple relationship of retailer and consumer. The company, which has its roots as a dollar store in Jim Crow Arkansas, today plays an out sized role in nearly every important issue in American politics. H. Lee Scott, Wal-Mart's CEO, often affects the hokey backwoods charm of the company founder Sam Walton, who built the company from nearly nothing into a retailing behemoth. The seller of lowest price that spread out from Bentonville, Arkansas beginning in 1962 has transformed into the largest private employer in United States, Canada, and Mexico, China's 8th largest trade partner, and one of the nation's largest consumers of open land². Wal-Mart is one member of a class of large big box retailers who have blanketed the American suburbs with new retail development, yet sits in a class by itself, being 3 times larger than the next largest retailer, Home Depot³.

Wal-mart is emblematic, indeed, central to, the greatest challenges of modern America, including the decline of manufacturing, the crisis of health care, urban sprawl, the growing trade deficit, the decline of the small town America, and growing income inequality. With growing public awareness, Wal-Mart has become a political entity with a presence much larger than its record sales,



Figure 1
Wal-Mart is most densely found in the south and mid west (Zaborski)

employment figures, turnover, profits, or share price. In short, it is a unique American institution, one which will continue to shape not just the economic, but also the physical and cultural landscape of the United States. The way we interpret and engage Wal-Mart, as citizens, consumers, and policy makers, will have broad implications on the future shape of our democracy, society, and landscape.

The Behemoth of Bentonville

The importance of Wal-Mart cannot be easily overstated. Its \$300 billion in revenue in 2005 was earned in 3750 US stores and another 1600 abroad⁴. With 1.6 million employees, and hiring another 125,000 in 2005, Wal-Mart is the nation's largest private employer. The Wal-Mart way of doing business ripples through its 61,000 vendors, for most of whom Bentonville is one of their largest buyers⁵.

The American economy has been deeply affected by the growth of Wal-Mart, with one study suggesting that 1/8th of US productivity growth in the late 90's can be attributed to Wal-Mart's rapid expansion⁶. Also, Wal-Mart's lower prices tend to force their local competitors to lower their prices as well, bringing a broad benefit to consumers. Consumer prices declined by 3.1% from 1985 through 2004 as a result of the growth of Wal-Mart. In 2004, Wal-Mart saved American consumers \$284 billion, or \$895 per capita⁷.

Wal-Mart's success is the result of three main factors, each of them mutually reinforcing. First, is an extraordinary commitment to minimizing labor costs, resulting in a dismal record of minimum wage jobs and high turnover, and ultimately the undermining of the wage base of retail jobs across the indus-

try. Second is the aggressive adoption of technology that allows Wal-Mart to collect ever more complex information about its customers, coordinate its logistics stream, and centralize management. Third is the economies of scale found in being so large, which allows the company to squeeze suppliers, saturate markets, and completely overwhelm competitors. These factors each bring their own fortune and peril.

THE LABOR ADVANTAGE

The low-paying, minimal benefit nature of the service sector jobs that are replacing dwindling manufacturing jobs means the American economy is changing structurally, not just tactically. Wal-Mart is the beachhead of this structural shift, not just by undermining the value of service sector jobs, but also by its tacit undermining of American manufacturing by its policy of 'Everyday Low Prices.'

Wal-Mart has earned its market dominance largely on the backs of its workers, pushing their wages to the bottom of the industry average, often with tactics that violate the company's own policies. The evidence of managers consistently understaffing stores to raise productivity per worker, forcing workers to work through breaks and after shifts, militantly policing against union sympathy (let alone organizing), and locking in workers at night, points to a criminal commitment to lowering payroll costs. Furthermore, in 2005, the nation's largest class action lawsuit was filed on behalf of 1.1 million female former employees charging systematic sexual discrimination⁸. The average Wal-Mart wage is \$9.68, while the retail average is \$12.28. Wal-Mart's explosive growth in the '90's was responsible for driving down that industry average by 1.5%. Management's tenacity in teasing efficiencies out of its workers has resulted in a 35%

Much of Wal-Mart's advantage over competitors comes from its skill in keeping labor costs to a minimum. While high turnover and poverty wages are the proud legacy of Sam Walton, the new managers in Bentonville have used their technological prowess to further erode payroll. Stores have two tiers of employment: managers, who are salaried employees, and associates, who are overwhelmingly second income earners, students, and senior citizens working part-time. The weekly schedules of associates are assigned from Bentonville, where the minimum number of employees are scheduled based on sales data. Also, with full-time defined as 35 hours a week, scheduling programs ensure that no one except managers will be able to work overtime. Assistant managers, being exempt from overtime, are used as bridge employees to pick up the slack that chronically understaffed stores experience ¹⁸.

TECHNOLOGY

Wal-Mart's roots are in the low tech ethos of Sam Walton, who operated on the timeworn discounting principle of "stack it high, sell it cheap." When Wal-Mart began to rapidly expand in the 1970's, Walton was shrewd enough to know he needed to recruit management talent that could shepherd the discounter through potentially painful growth. The new generation of Wal-Mart management, personified by the two post-Walton CEO's, first David Glass, and currently H. Lee Scott, knew that technology investments would be key to managing an increasingly unwieldy operation¹⁰. It was the aggressive adoption of technology that turned the hillbilly outfit from the Ozarks into the preeminent retailer we know today. As an early adopter of productivity-increasing technologies such as the

Universal Product Code, electronic data interchange, and now radio frequency identification, Wal-Mart has been able to continuously lower its management costs ¹¹.

The UPC, and the RFID technology that will replace it, are key elements that led to a shift in market power from manufacturers to retailers, by allowing retailers to collect increasingly sophisticated point of sale information. When retailers have better knowledge about what sells, and in what quantity, the terms they can extract from suppliers become ever more favorable to the retailer. Wal-Mart has been able to exploit the information it collects by developing a 500 terabyte computer system that analyzes sales data, processes automated ordering, coordinates shipments, and monitors stores. All that computing power allows IT managers in Bentonville to recognize subtle sales patterns and analyze markets with unprecedented sophistication. Wal-Mart's capacity is such that they noticed that beer and Pop-Tarts sell out in Florida before hurricanes, and had extra shipments en route before the next natural disaster¹³. Communications from Bentonville to stores happen over the world's largest private satellite network, launched in 1988 at a cost of over \$50 million, allowing precise coordination between thousands of stores¹².

RFID, which allows a unique identification number to be transmitted from a tagged object and read remotely, promises to bring even greater efficiency to what is already the best logistics and supply system in the world. Within the supply chain, RFID will mean that every product can be tracked as it enters and leaves every point from factory to store, reducing losses along the way. At the store, RFID will change the nature of the point of sale when it is no longer necessary to scan every object in the basket¹⁴.

Information technology advances allow Wal-Mart to work more efficiently with suppliers, and achieve cost control well below that of competitors. Elec-

tronic data interchange, through a system called Retail Link, allow remarkable coordination between Wal-Mart and its suppliers. Orders are placed automatically, compiled by algorithms processed in Bentonville which take into account real-time sales and projections. Because the volume of sales generated by Wal-Mart's 5,500 stores, the prices Wal-Mart buys at are indexed to the cost structures and operational efficiency of the suppliers¹⁵. The effect is that Wal-Mart is really a vertically integrated global supply chain, not simply a retailer.

Wal-Mart built its first automated distribution center in 1978, allowing the company to seamlessly route product from suppliers to stores with the minimum of human intervention. It perfected cross-docking, in which shipping is so well coordinated that goods arriving at a distribution center can be moved directly from the supplier's truck or container to a waiting Wal-Mart truck to deliver product without the need to warehouse¹⁶. The broad integration of suppliers and Wal-Mart means the goods are sold even before the supplier needs to be paid. The result is known as the 'Bank of Wal-Mart', because they are able to draw interest on revenues for the period between sales and paying suppliers. This now happens for 70% of what Wal-Mart sells, a figure they hope to get to 100%¹⁷. The result is the world's most efficient supply chain.

ECONOMIES OF SCALE

Discount retailers compete on price, and prosper by capturing sales of as many of the products people buy as as is possible to stock. The way to be able to offer the lowest price and the greatest number of products is by being as large as possible. Absolute size determines the influence Wal-Mart has over supplier's business practices and the price they are able to pay. Size plus the mastery of

its logistics stream allows Wal-Mart to tease efficiencies and cost control from its suppliers. This has fueled a dramatic move towards foreign suppliers. The shift of power from suppliers to retailers was helped by the greater access to cheap foreign manufactured goods around the late 1970's. Wal-Mart has been buying in China since the early 70's, and established a world purchasing headquarters in Shenzhen, China. Wal-Mart purchased \$18 billion worth of goods in 2004, accounting for 10% of US imports from China, and 30% of all foreign buying in China. The goods purchased in China are shipped in nearly 500,000 containers every year (and growing), enough to fill 100 deep draft container ships¹⁹.

When those products arrive on the dock in Long Beach, they are shipped off to one of 117 distribution centers strategically placed to serve several markets. Distribution Centers, like the one recently opened in Mount Crawford, VA, are largely automated, twenty-four hour facilities, designed to move products from hundreds of trucks a day to hundreds of Wal-Mart trucks. The newer D.C.'s are larger than 1.2 million s.f. in area, among the largest building being constructed today. The Distribution Center serves as the beachhead into new markets, located close to major interstate highways to service stores within a 250 mile radius (the distance a tractor trailer can travel round trip in one day). Once a new DC is built, Wal-Mart stores can be built rapidly in that market.

Wal-Mart builds in two main formats: the Discount Store and the Supercenter. The Discount Store, from 80,000 to 120,000 s.f. was the engine for growth until 1992⁹⁹. These stores carry the usual assortment of discount merchandise. The Supercenter format, which began to dominate after 1992, is much larger, from 140,000 to 220,000 s.f, and includes a full grocery store. When Bentonville discovered that the addition of food led to a 30% increase in non-food sales, Supercenters began replacing Discount stores. By 2004 there were 1600 Supercenters in the United States, and the company has indicated this number

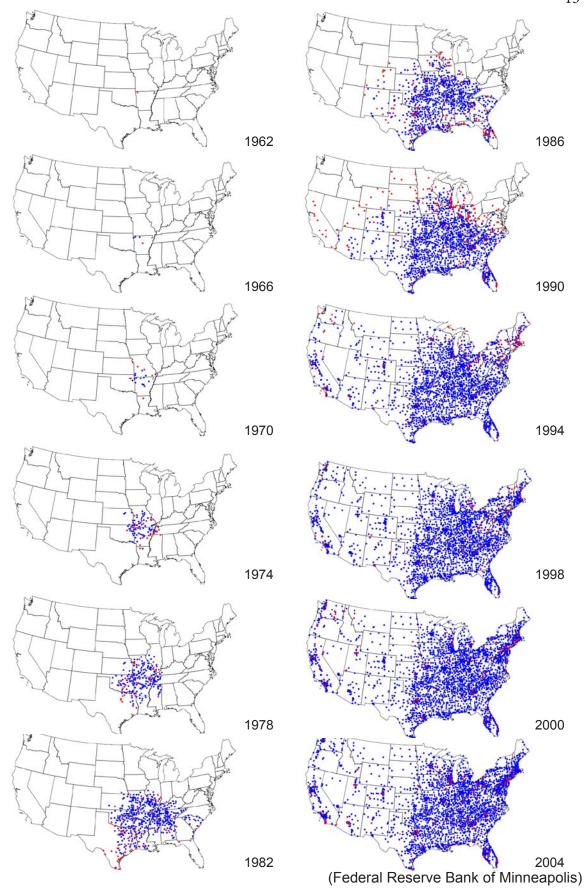




Figure 3
Wal-Mart operates 117
distribution centers,
placed according to their
potential to service a
wide pool of stores.

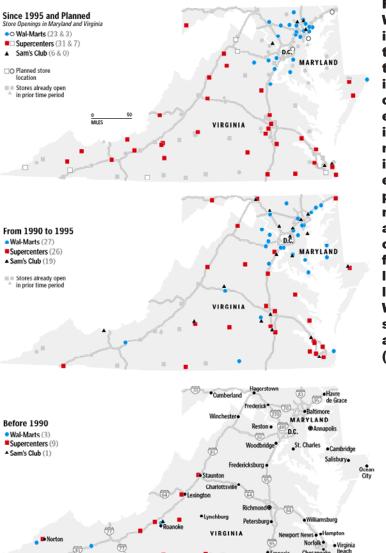


Figure 4 Wal-Mart has been rapidly expanding from its traditional heartland in the south and mid west into metropolitan areas of the west and north east. Rapid expansion into the Washington metropolitan region is illustrated here. Future expansion, though, has probably been underestimated given the secrecy and sensitivity around openly announcing plans for new stores. Often a lease is signed before local communities know Wal-Mart is even considering a store in their area.

(Washington Post)

will likely double by 2010.⁹⁹ Stores are located in order to be central to a reliable customer base, typically not less than 11 miles from another Supercenter, though the company has found that they don't neccessarily cannabalize each other's sales if located closer ⁹⁹.

THREATS TO GROWTH

Wal-Mart will always face obstacles to continued growth, some which will manifest themselves in the short term and others in the medium term. In the short term, Wal-Mart will face pressures such as those brought to bear in Inglewood: local opposition to new stores. Wal-Mart, a publicly traded company, must also face the wrath of Wall Street. In the medium term, Wal-Mart is vulnerable to the consumer goods market slipping out from under them due to changes in the way we shop, or disruptions in the supply chain. As Wal-Mart grows, and gains greater visibility in the daily lives of consumers and greater economic power, the company will be ever more vulnerable to the political winds.

Local opposition

Wal-Mart was once known for its tin ear for public relations, preferring brute force to finesse when trying to enter new communities. The turning point can be traced to the spectacular failure in Inglewood, CA to understand the depth of public opposition²². When, in 2004, Wal-Mart failed to win the needed political support to build a Supercenter on a sixty acre site in central Los Angeles,

they tried an end-run around the zoning officials. A ballot measure that included a seventy one page referendum was introduced amid clumsy campaigning on behalf of the company. Despite vastly out spending its opposition, lead by labor and church activists, the ballot measure lost, 61% to 39%. Since that time the company has come to understand that it needs to dynamically react to local opposition, be it on moral, labor, or planning grounds. It is unclear how many potential stores have been scuttled, but as victories pile up, Wal-Mart will have to find new ways of accommodating the new hostility.

There will certainly be victories for the anti-Wal-Mart community, a coalition of labor leaders, planning advocates, and NIMBY's, as Wal-Mart's dismal record of expanding into metropolitan areas has demonstrated. The failed plebiscite in Inglewood, CA, in which the company sought an end run around a hostile city council by funding their own ballot measure, was illustrative of what happens when an informed community decides. Similarly, in Chicago, San Francisco and Washington, as well as some rural jurisdictions such as Vermont, Wal-Mart has been held at bay, using a variety of tactics. A planned store in Rego Park, in the Queens Borough of New York City was abandoned because of fierce opposition that rallied around the ethics and employment practices of the company²³.

Internet sites such as Wal-Mart Watch and Sprawl Busters publish hand-books for community activists who want to prevent new big box development²⁴. Politicians, when confronted with questions of rogue states and potential allies, always speak of constructive engagement. For the opposition to Wal-Mart, constructive engagement means confronting the reality of the economy we live in, one characterized by the new service economy. A strategic, rather than merely tactical, opposition has to recognize that Wal-Mart will continue to grow, not indefinitely, but robustly for the next several years. Piecemeal victories merely push new stores into less politically organized (and often adjacent) communities.

The New Consumer

The power of information that shifted the balance of market power from suppliers to retailers also has the potential to give new power to consumers, and will change how stores are designed. RFID will make inventory tracking easier for both retailers and consumers. While RFID is seen as another sign of the apocalypse by millenarian Christians as well as a threat to privacy, the technology holds out the promise of streamlining shopping and the organization of the home. Advocates of the technology will have to demonstrate the enormous potential benefits to consumers when they are able to automatically inventory everything in their house.

The potential of RFID to revolutionize shopping by automating the minutiae of everyday buying should be explored. Cell phones enabled to read RFID tags and linked to Google will neutralize the information advantage of retailers. A shopper will be able to scan a product and have instant access to product reviews and be able to comparison shop with other retailers within a specified radius or internet retailers²⁵.

These advances will undermine the Supercenter format which is currently Wal-Mart's engine of growth. Supercenter layouts are calibrated to attract shoppers with loss-leaders, products sold at or below cost to lead customers to more profitable purchases. Wal-Mart has built its business around the slogans of 'Everyday Low Prices' and 'Always Low Prices,' and carefully maintain this impression. Supercenters use consumer goods to get customers into the door, and hope they'll buy groceries with their higher profit margins.

The growth of online retailing will also have a broad effect on retail design, changing how people buy low order goods that don't need to be experienced in

person. Tide is Tide, wherever it is purchased. While on-line retailing has expanded greatly in the last five years, one should anticipate even greater rates of growth as the interface for purchasing on the internet improves and the buying power of today's connected youth increases.

These factors will conspire to make the outlets constructed today and in the next 3-5 years quickly obsolete. Wal-Mart is nimble enough to adapt to the emerging retail environment, with the caveat that the spaces built today likely won't be part of the plan.

An Adversarial China

Reliance upon Chinese imports leaves Wal-Mart vulnerable to policy changes that might occur as the American relationship with a rising China changes. Wal-Mart is by no means unique in its importing habits, and the deep connections with China across American retail will be a moderating force in our relations. Many commentators argue that the constructive engagement started by Nixon has forged such a deep interdependence that a new Cold War has become unthinkable to either side²⁶.

Wal-Mart's reliance on Chinese sourcing underscores the unbalanced trade environment which contributes to our growing trade deficit. When, in the mid 1980's, when our trade imbalance favored Japan, Singapore, and Taiwan, the American government forced those nations to address their undervalued currencies that gave them unfair cost advantages²⁰. The value of the renminbi is held artificially low to fuel Chinese economic growth, led by exports to America. In 2005, the Bush Administration began to pressure China to rationalize it currency to increase it value relative to the dollar. The slight correction of 2005 that resulted has not brought the Chinese currency in line with its true value, making

imports artificially inexpensive and Wal-Mart profits artificially high²¹. Beyond its vulnerability to currency fluctuations, Wal-Mart may be a victim of long term souring of relations between a rising China and an over-extended America.

The rapid build up of the Chinese military, the decline of American hegemony, competition for energy, and continued tension across the Straits of Taiwan make the future a guess. Any scenario in which Pacific shipping were suddenly, if temporarily, disrupted would be catastrophic for Wal-Mart. Short of open conflict, Wal-Mart would be vulnerable to the re-emergence of protectionist politics that rise up from time to time. The company was stung in 1985 when the fiction of its 'Buy American' campaign was revealed. Garments labelled 'Made in the USA' turned out to be from El Salvador²⁷. Then they just stopped pretending. In a new era of protectionism, goods may have to be re-sourced.

An area of even greater unpredictability is fuel prices and climate instability. Sustained high fuel prices and responsive and responsible political leadership will lead to shifting patterns of consumption. Rising transportation costs will favor local suppliers, though it is hard to imagine that Wal-Mart will not be able to nimbly adapt to new circumstances. Stores will be designed differently and in different locations once consumers are less willing to travel long distances for less savings.

Chapter 3

Defining the Problem



Wal-Mart presents myriad challenges, and a significant coalition has gathered to take on Bentonville. The question for this thesis is simple: how do we plan today for a post-Wal-Mart world? The "solution," as I frame it, purposely does not address the issues that lie outside the realm of architecture, including but not limited to the quality of Wal-Mart jobs, unethical squeezing of suppliers, and the unhealthy consolidation of retail markets. It assumes the continuation and propagation of the "Wal-Mart Way," until the hazards outlined above exhaust the organization and lead to its diminution or demise.

Architecture cannot redress the gross abuses of labor, the poor provision of health care, or the undermining of American manufacturing. Answers to these questions, while certainly not outside the scope of design problems, lie in political action. The planning issues around Wal-Mart and big-box development, though, are ripe for intervention.

Most are familiar with the kinds of damage that "big-box" retailers have done to local communities. The impact upon small towns, documented first by Kenneth Stone in the rural Midwest, has been to consistently undermine local economies by undercutting local retailers¹. 'Local retailers' in this context refers to retailers that are locally owned, and most often supplied by local wholesalers. The significance for small towns is that the multiplier effect of local money, spent locally, is lost in the form of profits that go back to national headquarters. This is a feature of all national and regional chains, and has been the fount of local hostility to chain stores since the 1870's, when chains first appeared. The next step is when those national chains then decide to move to a new location, or are closed as part of a larger consolidation of the business. Chains such as Wal-Mart, Target, Barnes & Noble, and CVS are vacating their existing stores to

build bigger outlets, leaving the landscape littered with dead malls, abandoned strip developments and empty big-box super stores. According to the National Trust for Historic Preservation, of the five billion square feet of retail space in the country, fully half a billion sits empty². That empty retail space is typically surrounded by an equal amount of now dormant parking, doubling the blight upon the landscape. This new retail blight presents a huge problem for local planners and politicians who are left with few options. Quickly constructed retail developments are ill suited to other types of business, and present the problem of selling another retailer on a location that has already failed.

The roots of the retail vacancy problem are twofold. Chain stores are multiplying at a staggering pace. They've created a glut of retail space. In the last 12 years, per-capita retail space has increased 34 percent, from 15 to 20 square feet³. While this increase is indeed dramatic, the retail boom of the 1990's was only the latest wave in the retail explosion that started in the 1960's. Retail space per capita has grown ten-fold since the opening of the first Wal-Mart in 1962, the year that saw the opening of the first Target and K-Mart as well⁴. The result is an overwhelming excess of retail space in many towns. Any future economic downturn will find us left with millions of square feet of unused space. Any significant realignment of retail will result in a downward spiral of vacancy in the suburban strip malls of America, and starkly reveal the unsustainable nature of single use automobile-based retail developments.

The second part of the problem is the constant updating of format that retail chains seem to go through every ten years or so. Wal-Mart is one of the major perpetrators of this phenomenon. Wal-Mart Realty listed 370 properties available for lease or sale as of fall 2005. Those properties are spread across 35 states⁵. While Wal-Mart occasionally abandons town entirely, as in the case of Jonquiere, Quebec⁶, in which a store was shuttered rather than allow union

supporters to have jobs, more often stores are relocated to nearby larger spaces. Wal-Mart will be relocating as many as 110 stores in 2006, and many more thereafter as the more profitable superstore format replaces the old discount stores⁷. It is uncertain how long abandoned stores remain vacant, but it can be many years. The buildings are unsuitable for much besides big-box retailing. National retailers generally prefer to maintain the lease rather than let the property fall into the hands of a competitor.

Extracting value

Retailers and communities are not extracting the full value and potential from new big-box development. Retailers are certainly maximizing their short term investment, building the fastest and cheapest warehouses to sell their goods. The short term benefit to communities comes in the form of sales tax revenue and potentially lower prices for local consumers.

The disadvantage to retailers is that the store they are investing in will almost inevitably become obsolete. While this may seem to justify the low initial investment, the abandoning of sites alienates communities they once fought to enter, in addition to property holdings that no longer generate revenue. This strategy worked perfectly well for years, but as markets become saturated and the consumer public repeatedly experiences retail migration, there will be backlash against Wal-Mart and other retailers. As communities become increasingly aware that big box development drains business from existing retail, generates sprawl, and precludes other future land uses, retailers will have to offer something more.

The development trends of the last decade demonstrate an increasing awareness that accommodating varied uses on one site is at once more economi-

cally stable and better for cities. Mixed use development, while financially sound in the long term, is not in the immediate short term interest of large retailers, and must therefore be part of a public effort to tailor development to community needs.

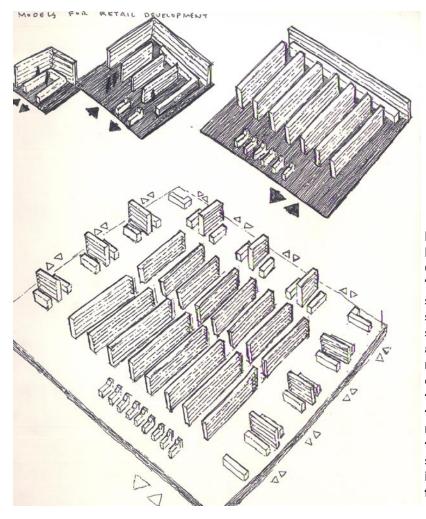


Figure 5 **Evolution of Low Order Retail Spaces. Traditional counter** service at the corner storewas replaced by self service markets, a necessity given the new variety of goods offered. As we move to larger spaces and technology allows for more control points, the return to smaller scales and personal interaction becomes feasible.

Chapter 4 The Site



Introduction

The H Street corridor of Northeast in Washington, DC, holds an important place in the cultural memory of the city, and will play an important role in the revitalization of the city after years of decline. This once-vital commercial corridor, running from North Capitol St. at the western end to the old Hechinger Mall at the busy intersection of Maryland Avenue, Bladensburg Road, Florida Avenue, and H St., anchors the struggling but rising Near-northeast neighborhood.

History of the Site

The site, known as the Old Sears Site, because of a Sears store that was once located there until it was demolished in the early 1990's, sits just outside the historical limit of the L'Enfant Plan of Washington of 1792, at what is now Florida Avenue (see Figure 3). Beyond this Avenue, which arcs across the historical north of the city, the relatively flat terrain of the city turns hilly. This meant the site



Figure 6
The intervention site in relation to the Captol and RFK Stadium.

would, for much of the city's history, play the role of an edge, and accommodate uses that fit that role.

As Washington pressed to modernize in the decades after the Civil War, the explosive growth that quadrupled the city's population in the four decades from 1860-1960 largely bypassed near-northeast. The sparse settlement was anchored by two institutions: first the Columbia Institution for the Deaf, Dumb, and Blind, established by Congress in 1857, and the Little Sisters of the Poor, established in 1870. The Columbia Institution, which would become Gallaudet University in 1894, was built on Boundary Avenue (later Florida Avenue) outside the limits of the L'Enfant Plan. The Little Sisters of the Poor, a charitable society, was found at the current location of the Children's Museum, at the western edge of the H Street Corridor¹.

Industry and commerce slowly filled in the empty boulevards, assisted by the street car service that was established in the 1890's. The turn of the century saw the construction of Union Station, brought into reality by Daniel Burnham, an architect at the leading edge of the City Beautiful Movement². City Beautiful advocates encouraged the construction of large public works and slum clearance

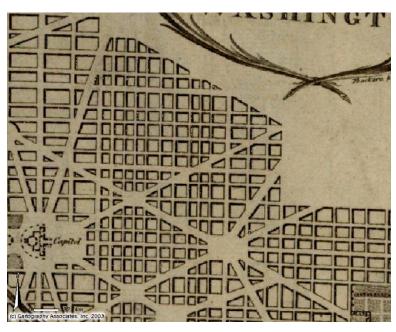


Figure 7
The site was just outside the outer limit of the 1792 L'Enfant Plan (Rumsey)

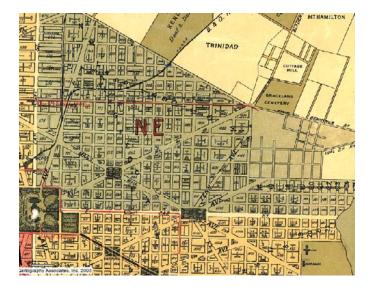


Figure 8
The 1887 Silversparre
Plan shows the site before the continuation of
Maryland Avenue, when
much of the site was
covered by the Graceland Cemetery (Rumsey)



Figure 9
The 1909 map shows
planning for the continuation of Maryland Avenue as well as the terminal for the street car that
ran down H Street into
downtown (Rumsey)



Figure 10
This undated site photo shows the siting of the Old Sears before it was demolished. (trails.com)

as means of fostering civic pride and public virtue. Not only did Union Station precipitate the destruction of the Irish slum of Swampoodle, but the extensive train yards would cut off the near northeast neighborhoods from downtown.

At the turn of the century, DC was 30% black, the highest percentage for any American city. This proportion would grow with war mobilization, southern black migration and white flight, and by the 1960's the city was majority black. By 1950 at least 10 businesses along H Street were black owned, though the theatres, movie houses and restaurants were mostly segregated. Nevertheless, this was one the most important shopping districts before a number of factors conspired against continued prosperity. A raft of federal policies encouraged further flight to the suburbs while allowing the decline of the housing stock in the inner city. By 1960 nearly a third of housing units were vacant or deteriorating. Local retailers were competing not just with new suburban malls but also with beleaguered downtown retailers. Finally, the riots of 1968 following the assassination of Martin Luther King would extensively damage parts of the corridor³.

Population decline accelerated after the devastation, first by middle class whites and followed by middle class blacks in the 80's and 90's, resulting in a 56% decline in total population of the area from 1963-1998. Today the neighborhood is recovering from the crack epidemic of the 80's, welcoming a new metro stop at Florida and New York Avenues, and finding itself targeted by the real estate feeding frenzy that has swallowed more desirable locales⁴.

Present Conditions in the Neighborhood

The site under consideration at the Old Sears site cannot be understood apart from its context at one end of the vibrant H Street corridor. This consists of the 13 block corridor from the Hopscotch Bridge on H Street to the H Street/ Florida Avenue intersection at the eastern end. These gateways are both under-

developed, and of the 230 commercial properties in between, 30 percent of store fronts and 47 percent of upper stories were unoccupied as of 2002. The corridor is heavily traversed, with 24.000 car trips per day and two heavily used bus lines. There is a heavy deficit of parking, with only 110 off street public parking spots. H Street's present retail mix includes fast food and carry-out restaurants, beauty salons, barbershops, convenience stores, and speciality shops. There is currently a Safeway at the Hechinger Mall. Market studies conducted by the DC Planning Office indicate that the corridor can support 300,000 to 350,000 s.f. of retail. Total retail space on the corridor presently is over 1,000,000 s.f., of which roughly 370,000 is currently active. All of which means the Planning Office thinks there needs to be some consolidation of present retail and a broadening of uses⁵.

There are many historic properties in the area, some of which have been severely compromised, others of which still express the historical legacy of this corridor. At the eastern of the corridor is the 5 acre old Sears site. In recent years there have been several plans to construct housing on the site, the most recent a plan by Clark Development of Bethesda to build 230 apartments and 50 town houses⁶. A 2002 plan called for either a large format retailer or high density housing for this site ⁷.



Figure 11
The DC Planning Office 2002 Study considered the
H Street corridor in terms of discreet districts: residential, retail, arts & entertainment, and then the
Old Sears site, from west to east respectively. (DC
Planning Office)

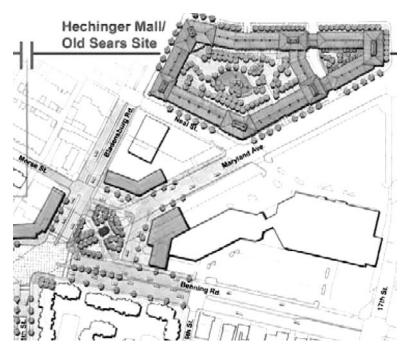


Figure 12
The DC Planning Office 2002 Study anticipated the contruction of housing, possibly with ground floor retail, and the reconfiguring of the Florida/H Street/Florida intersection give better definition to the street. (DC Planning Office)

Immediate Site Conditions

The Old Sear's Site sits just north of the busy intersection of H Street, which leads downtown, Maryland Avenue which crosses diagonally up Capitol Hill to the Capitol, Benning Road which leads to the Anacostia River and he interstate, and Bladensburg Road, which continues north past the National Arboretum towards New York Avenue.

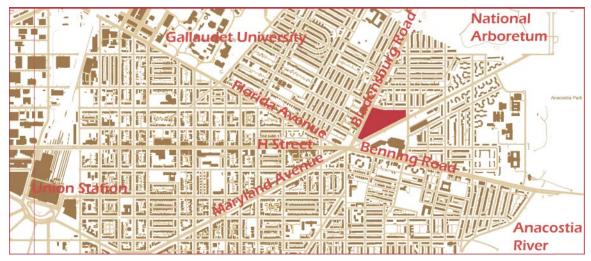


Figure 13
The immediate context shows that the site is central to a number of underappreciated northeast Washington amenities. (Zaborski)

The site has been unoccupied for more than fifteen years, and has become grown over with scrub. It slopes up almost 20 feet in the direction of Cottage Hill just to the north east. The elevation presents the opportunity to exploit terrific views of the monumental core and RFK Stadium, as well as sectional changes to accommodate parking and hidden program.

Preliminary Site Analysis

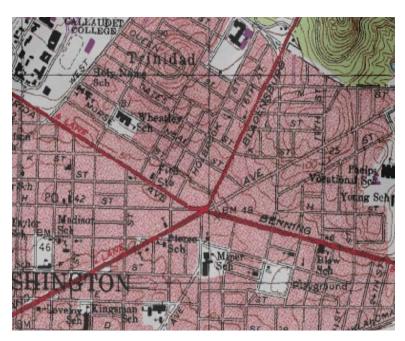


Figure 14
USGS topography demonstrates the sense in L'Enfant's limit at Florida Avenue, as the hills present greater challenges for building. The slope of the site, though, gives it commanding views (trails. com, USGS)



Figure 15
Viewshed from top of site down towards H Street, and across Capitol Hill to the Monumental core. On the horizon one sees the Library of Congress, the Capitol, and the Washington Monument. (Zaborski)

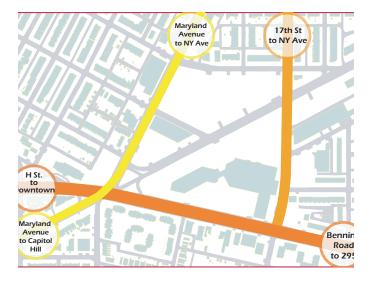


Figure 16
Most traffic passes from
Benning to H Street heading downtown, or up 17th
towards NY Ave. Maryland Avenue is mostly
empty, with a wide easement that suggests it
would support a lively
sidewalk. (Zaborski)

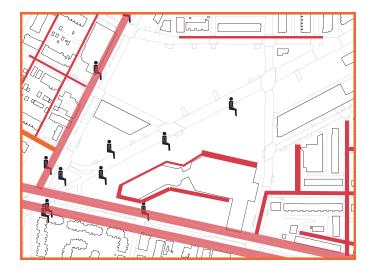


Figure 17
Pedestrian traffic is
heavy along Bladensburg
road and H Street, both
of which have important
bus lines. (Zaborski)



Figure 18
The site is surrounded
by residential neighborhoods. (Zaborski)



Figure 19
Drainage across the site runs down from Cottage Hill southeast towards the CVS. (Zaborski)

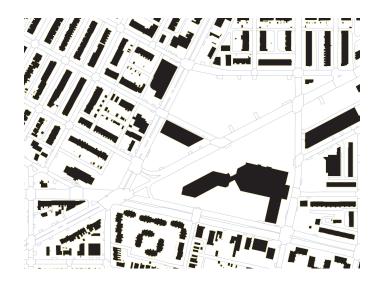


Figure 20
The neighborhood is
densely planned, with most
of the open spaces seen
around the site reserved
for parking (Zaborski)

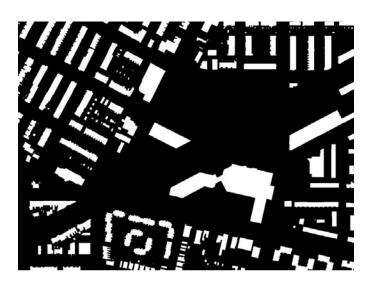


Figure 21
The site, at the center of the neighborhood, lacks a sense of place due to the commercial developments being pulled back from the street. (Zaborski)



Figure 22 View from northeast corner of site down Maryland Avenue towards the US Capitol (Zaborski)



Figure 23
Two story rowhouses
and 4 story garden
apartments border the
northern edge of the site
(Zaborski)



Figure 24
The street between the
Old Sear's site and the
CVS on the southern side
of the site has the character of an alley. (Zaborski)

Chapter 5 Strategies and Directions



Site strategies are particular to the constituency they are meant to serve. Were Wal-Mart my client, and interested in developing the Old Sears site in the simplest manner, then a large blue box would be constructed along Bladensburg Road, with an asphalt sea consuming the rest of the site. It is a bad solution tin any context. This prospective warehouse would serve its purpose for some years, then return to its current state of rubble and scrub.

Another strategy would integrate the big box into a housing development, following one of two courses. First, one could stack the retail, parking, and housing, with the retail on the first floor, parking above, and housing above that. This is the strategy at Tenleytown (see below). Alternatively, the uses could be separated on the site, with a multiple floor Wal-Mart on one side, and housing on the other.

The development intended for the site will integrate a Wal-Mart store into a housing development. This retail outlet will be limited to 120,000 s.f. While this is certainly enormous, Wal-Mart Supercenters are typically 150,000 to 210,000 s.f., which includes groceries as well as discount merchandise². This format has been the company's main vehicle for growth in the last four years because of the higher profits and foot traffic generated by groceries. As Wal-Mart blankets rural and suburban markets with stores, it seeks urban outlets, and has developed smaller format stores to accommodate greater site constraints. One such format is the Neighborhood Market, which at 80,000 s.f., is the size of a large grocery store³.

Wal-Mart has been stymied in its push to enter urban markets primarily because of the threat it poses to grocery chains, and the size of the outlets. Unionized grocery stores all over the country have seen their market share erode severely when the fiercely anti-union Wal-Mart undercuts their prices with their wage advantage. A deal to construct a Wal-Mart in the Brentwood neighborhood

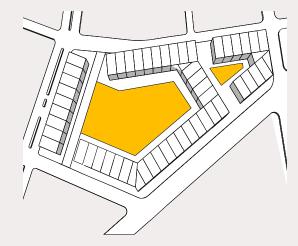
of Washington, D.C. was scuttled by a previous agreement by the landlord with Giant Food not to lease to another grocer, though Wal-Mart insisted it would not sell groceries⁴. Communities also oppose Wal-Mart based on the bulk of the store and the traffic they generate.

The retail component will be configured with greater emphasis on the edge condition and the opportunity to reconfigure the space into smaller autonomous retail units. The retail will predominate on the ground level, while the above floors will be housing.

The choice of rental housing is a deliberate reflection of the immediate need to replace the Section 8 housing at Temple Place to the west of the Maryland Avenue site⁵. While rental housing is stigmatized in a culture that defines homeownership as the very essence of the American Dream, thriving communities need a variety of housing options. Homeownership incurs significant risks for those with poor credit history, or may move in the next several years. Rental housing fills an important niche in the housing marking, though other tenure options such as limited equity cooperatives will not be ruled out. There are a number of innovative schemes that preserve affordability and allow tenants to build equity. The dearth of affordable housing in Washington, DC, exacerbated by the replacement of affordable housing stock with new luxury development, means that the city will have to find new housing strategies. One way to address the problem is to find private partners such as Wal-Mart.

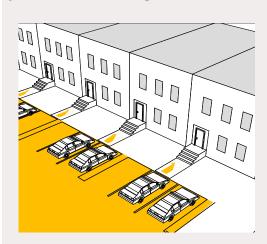
Housing lies at the core of sustainable development, particularly on this site. Housing provides a customer base, eyes on the street, and 24 hour presence. In attempting to integrate big box development into an urban community, it is helpful to reflect upon what that community may want, and how those aspirations might be complemented or jeopardized by the involvement of Wal-mart.

open space

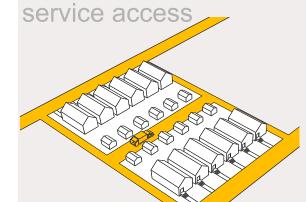


Trinidad needs casual open space that can be used for meeting, gathering, sitting around with friends, walking the dog, playing chess, getting some sun, throwing a football, etc. off the street.

park where you live



people want to park as close to the door of their home as possible, preferable under cover.



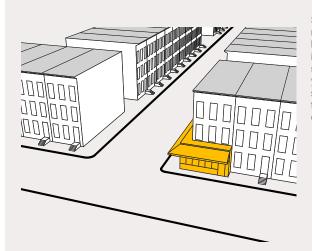
Alleys make space for service vehicles and residents to access the neighborhood unobtrusively.

community services



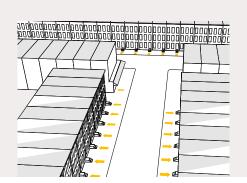
The glue of communities are the institutions that bring citizens together, whether churches, libraries, community centers, or day care. Vibrant neighborhoods provide space for the civic realm.

small scale retail spaces



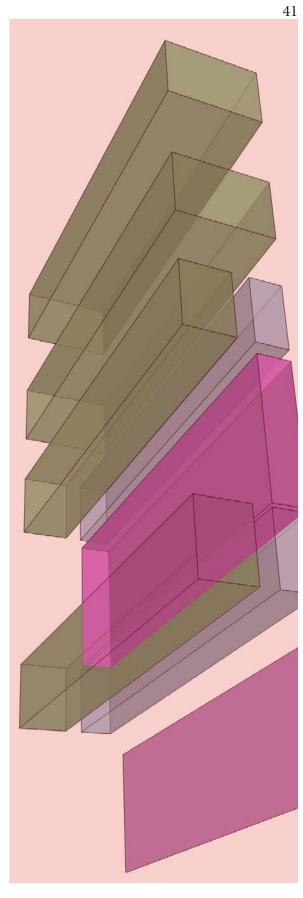
Spaces for small commercial enterprise have been the critical infrastructure of H street for a hundred years. The corner store becomes a node for casual daily encounters.

low rise, high-density



Trinidad is recovering from the loss of population that began in the 1950's, which makes commercial investment risky. New housing will form the core of a revitalized and vibrant community and relate to the life of the street that makes DC vital.

Chapter 6 Planning and Programming



The site is zoned C-3-A. This "permits matter-of-right development for major retail and office uses to a maximum lot occupancy of 75% for residential use, a maximum FAR of 4.0 for residential and 2.5 FAR for other permitted uses and a maximum height of sixty-five (65) feet.1" ¹

Site area 215,000 sf

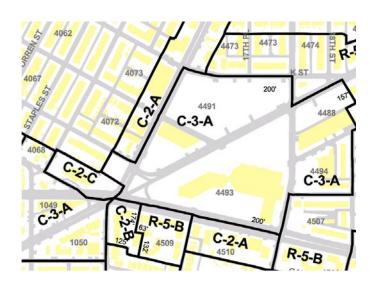


Figure 25 the zoning of the site allows a mix of uses. (DC Planning Office)

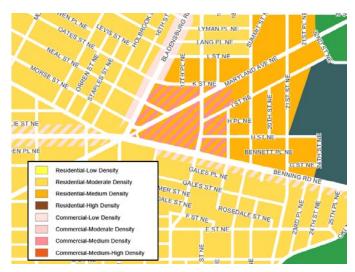


Figure 26 planned land uses include housing and retail. (DC Planning Office)

Residential F.A.R. 4.0 x 215,000 s.f 860,000 s.f.

Retail/Office F.A.R 2.5 x 215,000 s.f. 537,000 s.f.

The program is to include a Wal-Mart discount store, affordable rental housing with a mix of 1, 2, and 3 bedroom units, and an early childhood center. This programmatic content, as well as appropriate parking for the residents and shoppers, will be accommodated under the lower F.A.R. of 2.5.

Program Planning

a) Retail 120,000 s.f.

Parking 180,000 s.f.

The retail space is derived from the average size of stores constructed in large cities which do not include the grocery store component of a Supercenter. The store proposed for Rhode Island Avenue in 2004 would have been 110,000 s.f. The parking was calculated according to the normal parking ratio for retail development, 5 cars per 1000 s.f., or 600 cars. Assuming the parking will be in a garage, each spot requires 300-325 s.f, or 180,000 s.f. of parking.

b) Housing 174,000 s.f.

Parking 30,000 s.f.

The housing component will consist of 200 units of affordable rental housing. The units will be a mix of 1, 2, and 3 bedroom units to allow a mix of family sizes. The size and number of units were derived from the interplay of the F.A.R., recommended site density, and the height limit.

suggested unit sizes 6

type room count area range efficiency 3 150-300 1 bedroom 3.5 400-600 2 bedroom 4.5 600-800 3 bedroom 5.5 800-1100		max. occupants 1 2 4 6		cars per family 0.75 1 1.25 1.5		
suggested units per acre 7						
2 stories		standard 30	maximum 35	site coverva 35%	ge	
3 stories		40	45	30%		
4 stori	es		50	55	25%	
height limit	65'					
neight iiinit	00		retail	20'		
			parking	10' 11'		
			housing housing	11'		
			housing	11'		
				63'		
unit mix						
				lroom x 1100		82,500 s.f.
			(75) 2 bedroom x 800 s			60,500 s.f.
			(50) 1 bed	room x 600 s		30,000 s.f. 172,500 s.f.
			se	ervice &	x .20	34,500 s.f.
			ci	rculation		
					gross	207,000 s.f.
parking		(75) 3 bed	lroom x 1.5	112		
			(75) 2 bed	(75) 2 bedroom x1.25		
			(50) 1 bed	lroom x 1.0	50	76 000 o f
				256	x 300 s.f./ car ⁸	76,800 S.I. x.50
						38,500 s.f.
housing tota	al					245,500 s.f.
early childh	ood					
early childhood center			in	indoor space		2,000 s.f.
				outdoor space		
						3,000 s.f.
Wal-Mart				retail		120,000 s.f.
				parking		
						300,000 s.f.
				total gsf		



Figure 27
This diagram shows a
180,000 s.f. Wal-Mart Supercenter inserted on the
site. Such a store, which
includes a tire center
and nursery, typically
requires an equal area of
parking. (Zaborski)

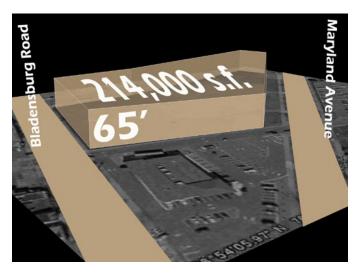


Figure 28 the total usable site area is 214,000 s.f. (Zaborski)



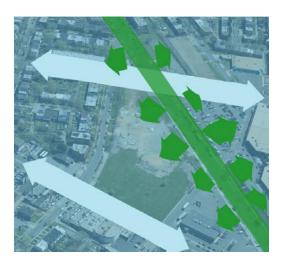




Figure 29

This diagram shows the Old Sear's site and adjacent properties that could benefit from comprehensive planning. The uuper site is vacant, formerly rowhouses, while the upper right site houses a community center. The triangle below is parking for the Safeway supermarket.

Figure 30

A broad strategy would account for the high volume of traffic on Bladensburg Road and 17th St. contrasts the wide untrafficked expanse of Maryland Ave. The masterplan should exploit the character of Maryland Ave, which also yeilds terrific views of the Capitol Building (see photo below)

Figure 31

This diagram shows the edges suitable for commercial development, though the DC Planning Office guidelines are pessimistic about the prospects for retail development on this site. That equation could change.



Figure 32

This diagram shows a 110,000 s.f. Wal-Mart store placed on the site using the same site strategy as the failed Sears. Parking would cover the eastern half of the site. The mistakes of the past repeated.



Figure 33

This diagram shows the same 110,000 s.f. Wal-Mart with a shell of housing. The parking remains, and the open space created on the roof could be unoccupied green roof to allow the bigbox unfireproofed room to remain, if so desired.

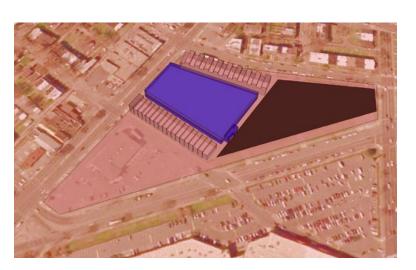
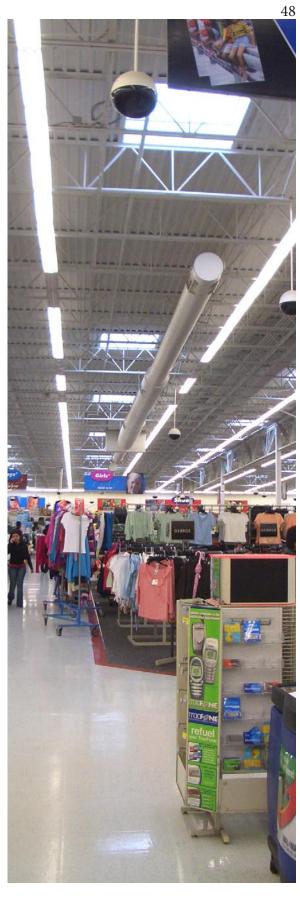


Figure 34

This diagram shows a two story, 160,000 s.f. Wal-Mart on the same footprint, with housing at the edges but separate from the store. Chapter 7: Precedents



In exploring the role architecture plays in retail, one is drawn first to the obvious and apparent. The representational agenda of design in retail applications is seldom deeper than the thin paper of a newspaper advertisement, and more often than not as fleeting as a Super Bowl commercial. If there is design involved, it is merely themeing, not architecture per se.

There is the blinding fluorescent thrift of Sam's Club, notions of Nantucket in Restoration Hardware, hardwood veneers to recall English bookshops in Barnes & Noble, uplighting to simulate daylight in Whole Foods, etc. The origin of themeing in retail can be traced to the growth of department stores, starting in New York in 1840. Macy's and Marshall Field were conceived as destinations for the whole family, and were bursting with architectural grandeur, eclectic detail, and soaring staircases. They were well served by this opulence, as department stores commanded the retail landscape until discount chain stores began to appear in the 1920's and '30's 1.

If we looking beyond themeing, to which Wal-Mart has more recently been subjected as it expands into less desperate communities, and discuss the

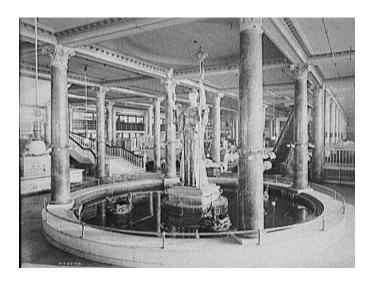


Figure 35
late nineteenth century
department stores such
as the Seigal Cooper
in Chicago were lavishly appointed, as much
spectacle as shopping
(library of Congress)

architecture, few retail chains have engaged design as something more than a pragmatic concession. It must be reiterated that we are talking about low order retail (groceries, daily necessities, home goods, etc.), so we need not mention Rem Koolhaas or Peter Marino. High order retail almost requires an architectural agenda to reinforce branding strategies that universally include communicating quality, exclusivity, modernity, and perhaps some more exotic values that indicate differentiation. This agenda permits expression, experimentation, and beauty. Among low order goods there are few examples of high design employed by retail chains.

One notable exemplar is M Pries, the Austrian grocer. The upscale supermarket chain has distinguished itself on the design landscape by hiring well known architects, including Dominique Perrault and Peter Lorenz to design stores. The results are typically airy, glassy spaces with views of the Alps, each exhibiting individual architectural motivations. M Preis architects often employ green roofs and sustainable principles which have broadly taken hold in Austria. For M Preis, design is an expensive branding strategy that elevates the shopping

Figure 36 this M Preis outlet designed by Peter Lorenz presents a contemporary face.







experience into an event to be savored.

The stores seem like a modern incarnation of the Best department stores designed by SITE in the 1970's which sought to draw customers with whimsy and a pop sensibility. M Preis is the product of cultural conditions not found in the US, where urbanism must be accommodated by retailers, rather than evaded in green field developments. The integration of major retailers into urban and more affluent suburban communities has necessitated deign concessions to the aesthetic standards of well educated constituencies and new site constraints.

The themeing mentioned above, as when the standard-format store is clad in adobe (as in Taos, New Mexico), given arched windows and Spanish tile roofs (as in Forth Worth, Texas), or given Swiss-looking timber beams (as in Lakewood, CO, above), are functions of public relations. As Wal-Mart has become politically controversial, it deploys ever more sophisticated publicity campaigns to gain community approval, typically including charitable contributions to local causes. Site constraints result in multi-story stores, which present considerable challenges to the big-box. Target pioneered the US introduction of shopping cart escalators in its Minneapolis store.

Figure 38
local authorities scored
a dramatic victory in
Lakewood, CO by convincing Wal-Mart to apply
alpine decoration to its
facade.

Figure 39
Wal-Mart in Baldwin
Hills, LA, is a rare example of an adaptive reuse superstore. (Plentymag. com)





las (Dicker, 10).

A discussion of the architecture of retail must look beyond just the store where the customer meets his detergent, just as a discussion of John Soane's House must range beyond where Mr. Soane greets his guests. The store cannot exist on its own; it is only the last room in a grand procession that begins in a mine, factory, or farm. The grand design is in the logistics system that networks spaces of production with spaces of consumption. The store, though, is important as the interface with the public, and is therefore the focus of attention.

The Wal-Mart Experience

Wal-Mart has adapted to and refined the norms of big-box construction in its stores, with predictable and familiar results. The Wal-Mart experience is uniformly banal and unpleasant. The commitment to structural expression allows for the maximum perception of height in the cavernous space, which seems to extend to the horizon. The grain of white painted roof decking is contrasted

Figure 40
The entry signifier on the vast facade of the Wal-Mart in Leesburg vaguely recalls a theatre marquee rendered in different shades of concrete block. The sign, grossly undersized, is probably of a standard that hasn't been updated since smaller formats prevailed. The entrance adequately does the job of

saying, "enter here."



Figure 41
The interior near the entry is a riot of promotional items. The horizon lies off in the distance, under an inverted sea of trusses. The inside is dreary yet spirited.





Figure 42
The Supercenter format is over 200,000 s.f. in its newer incarnations, though this recently constructed store in Leesburg in only 135,000 s.f. A vast area of parking lies in front.

by open-web joists (also white) spanning between widely spaced columns, and reinforced by the blinding fluorescence of the lighting. The choice of fluorescents over sodium halide allows the establishment of a secondary stratum at which one also finds duct (white painted) and black glass orbs of security. The roof plane is occasionally broken by square skylights set in a grid, permitting a perception of diagonal space. The floor is white vinyl. Between floor and ceiling are racks of goods set in rows, and placed according to algorithms and supply contracts to maximize sales.

The exterior is subject to the themeing mentioned above, which called for two types of concrete block. There is a large entrance in front, appropriately well-signed, and 3 loading docks in back. Stores of this category are typically 150,000 square feet, with almost equal space in front for parking. As these 300,000 s.f. need to be coplanar, significant site improvements were necessary, resulting in an artificial mountain worthy of the Dutch. This outlet was part of a development that included a Sam's Club and a Lowe's, in a new commercial zone outside of Leesburg, VA.

Suburban examples such as that found in Leesburg illustrate some of the universal characteristics of Wal-Mart stores as they are constructed today. These factors are integral to the business model, and need to be addressed individually.



Figure 43
Wal-Mart's business
model is tuned to suburban markets, which offer
conditions at odds with
the requirements of urban
sites

visibility Signage must be large and unmistakable in the visually intense strip mall environment, and must be recognizable from a long enough distance that one can decide to stop in on impulse. WAL*MART single point of entry Funnelling all foot traffic through a single point creates a captive audience. The 'casino effect' increases sales by directing consum-ers past more goods than they set out to buy. Increasing instore sales is a function of keeping consumers in the store simple cheap construction the big box is constructed cheaply and rapidly from CMU, lightweight steel joists, and unfireprotected steel deck. Skylights are occasionally used, as they have been demonstrated to increase sales

Figure 44
The suburban prototype and its characteristics.

Eastern Market remains as one of the last traditional market spaces left in Washington. The market building internalizes the public nature of outdoor farmer's markets, providing an airy neutral space for commerce. Its single story interior is consistent with contemporary supermarkets, but the space created under the shed roof, necessary in the pre air conditioned era, reinforces the sense of centrality and monumentality. The architecture has a civic character with formal associations with the schools and libraries of the late nineteenth century, with vernacular materials and classical elements.



Figure 45
Eastern Market adopted a civic skin and monumental presence to announce its central role.
(Zaborski)



Figure 46
The Market is surrounded by useful and significant outdoor spaces (Zaborski)

What is most noteworthy as compared to contemporary retail spaces is the utter lack of sales messages and marketing. The building is hardly even labelled as a market, and inside the burden of making the sale is on the display of goods and salesmanship (which is mercifully lacking). This lack of 'push' in addition to the historic nature of the building, makes shopping feel organic and natural.

Also significant is the provision of outdoor space, which allows the space of commerce to expand and contract in concert with demand. The covered outdoor walkways are swarmed with shoppers and sellers on the weekends, while during the week they become pleasant shaded spaces. It is significant that on weekends the market spreads to adjacent properties, including the middle school parking lot across the street, taking full advantage of unused open space.

Hybrid Precedents

In the Tenleytown neighborhood of Washington DC one finds a hopeful example of mixed use architecture. This adaptive reuse project sought to reinhabit a Hechinger's home store, finding a new anchor tenant and constructing housing above. The existing building of reinforced concrete was amenable to the expansion of use. The original building was essentially a parking garage with retail on its first level. The parking remains on the roof, with the new housing development perched above. What is interesting is how the architect avoided mixing the circulation of the different uses, with a discrete side street lobby for the luxury condos, and separate parking levels for shoppers and residents. Also, the uses are strictly segregated within the organization of the building, as though an apartment block were just set down on a site, and there happened to be a Best Buy and Container Store underneath.



Tenleytown Housing Washington, DC Shalom Baranes

Figure 47

The residential lobby is set away from the commercial program, and given an architectural character that reflects the curvilinear design. (Zaborski)



Figure 48

The housing is set back from the traffic of Wisconsin Avenue, yet still manages to have a commanding presence on the intersection. (Zaborski)



Figure 49

What was previously the parking deck to the hardware store now acts as a ground plan for the housing development. (Zaborski)

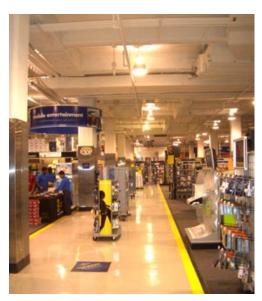


Figure 50
The Best Buy is just a Best Buy, but in concrete. (Zaborski)

Unite d'Habitation Marseille, France Le Corbusier



Figure 51 Unite d'Habitation piloti



Figure 52 Unite facade

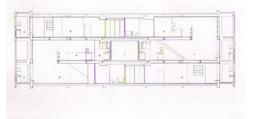


Figure 53 Unite section



Figure 54 Unite interior

Le Corbusier's Unite d'Habitation *in* Marseilles, France came at the beginning of the social housing boom of the post-war era. It was highly influential upon direction of housing, and seems to have convinced architects that streets could be brought up into the sky¹.

The skip-stop plan, allowed for apartments of unusual dimension and space. The layout is burdened by the need to admit light deep into the core, and spreading individual apartments across multiple floors duplicates stairs and eats up floor space. What is inspiring about Unite is the broad concept for creating a new type of community, one that responds to the needs of the working class in post-way France. It is unabashedly utopian. The representational system, with liberally applied color and sculptural elements, sometimes didactic, sometimes symbolic, also offer intriguing design possibilities¹.



Figure 55



Figure 56

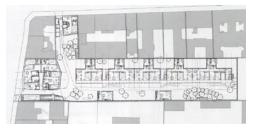


Figure 57



Figure 58

Rue de Suisse Housing Paris, France Herzog + deMeuron

This 90,000 s.f housing project negotiates two very different site conditions: a normative street condition and the interior of the urban block. The strategy employed was to develop a variety of solutions depending upon differing conditions of exposure. The street facade resolves itself much as its neighbours in the Parisian way: large shuttered openings set in a regular pattern. In the interior of the block, primacy was given to providing visual access to the access court. Continuous shuttered balconies face out the obverse side.

The access court side, in addition to planted open space, also has two single family homes, which gives unexpected variety and life to the space.

Surfaces are considered monolithicly, with their material and composition relating to the program and composition of the spaces they face in a complementary manner. Operable louvres in warm wood respond to the activity of the court. Woven wire mesh (a substratum for climbing vegetation) respond to sunlight. The planted roof responds to the sky¹.

1. Phaidon Atlas of Contemporary Architecture. Phaidon Press, London, 2002. page 371



Figure 59

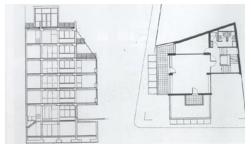


Figure 60



Figure 61



Figure 62

Office Building Athens, Greece Issiaiass + Papaiaonnou

This 10,000 s.f. office building in Athens employs an interesting structural arrangement.

The core of the building is a six meter square concrete tower from which steel boxes project and hang from. The concrete seems to order the building while the steel projections allows the building to reach dynamically into the street in a variety of configurations.

The interior expresses the structural concrete in timber-molded surfaces, with the projected spaces having a light and delicate feel. The contrast of wooded louvres, the expressed structural steel, and the heavy concrete core make for an interesting composition¹.

^{1.} Phaidon Atlas of Contemporary Architecture. Phaidon Press, London, 2002. page 891

Chapter:8

Architectural Resolution



The architectural accomodation of programmatic requirements of Wal-Mart's business model and the aspirations of the community resulted in a novel development.

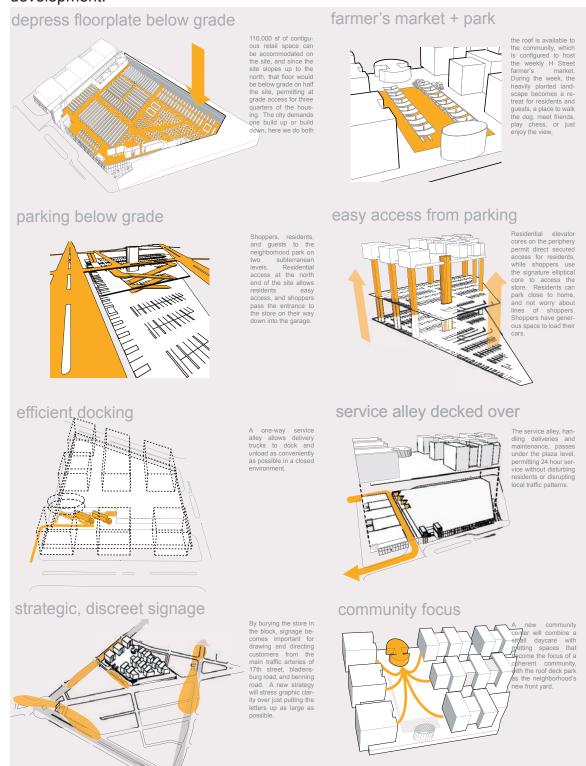


Figure 63

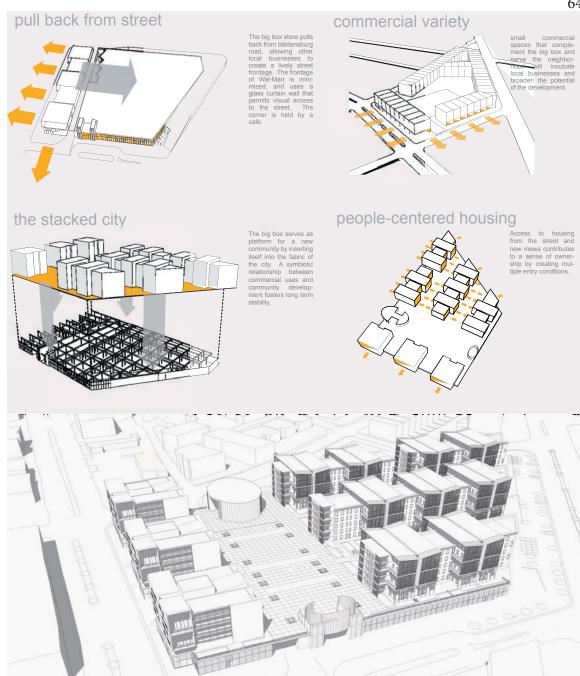


Figure 64

Diagrams of the organizational principles behind the final scheme



Figure 65 site plan

The architecture that resulted from the explorations during the thesis process resulted in a stratified solution. Recognizing that very different primary user groups, residents and shoppers, would have to fluidly access the site, the final jury suggested a more rigorous separation of their experience. This should include the access to the parking, as the mixed solution with assigned spots would present a safety concern. The jury shared my desire to further explore the articulation of the housing, and explore the opportunities for varied expression and tectonics.

The scheme resolves the integration of Wal-Mart into the city, addressing the significant issues of service, access, and marketability. The housing is concieved more loosely, with an understanding that the precise mix of units is a function of desired demographic mix. The flexible plan supports live-work, one

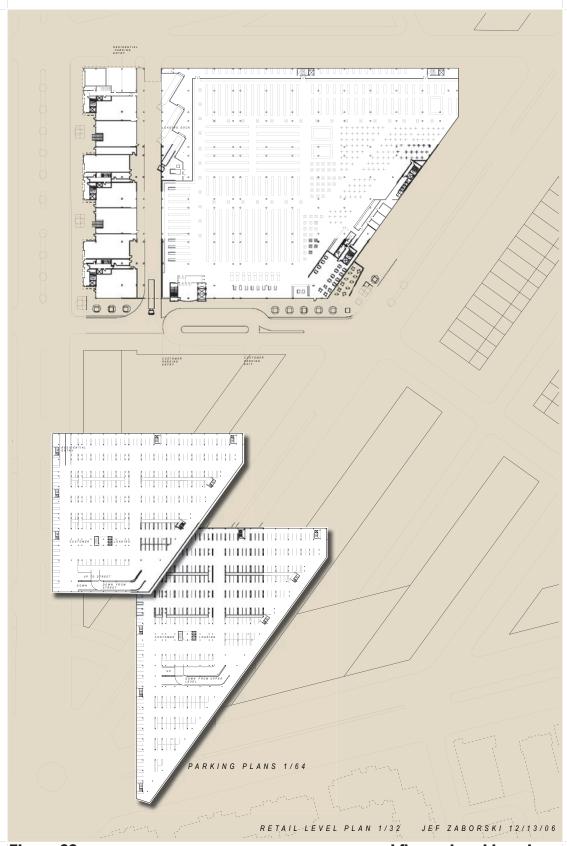


Figure 66

ground floor nd parking plans

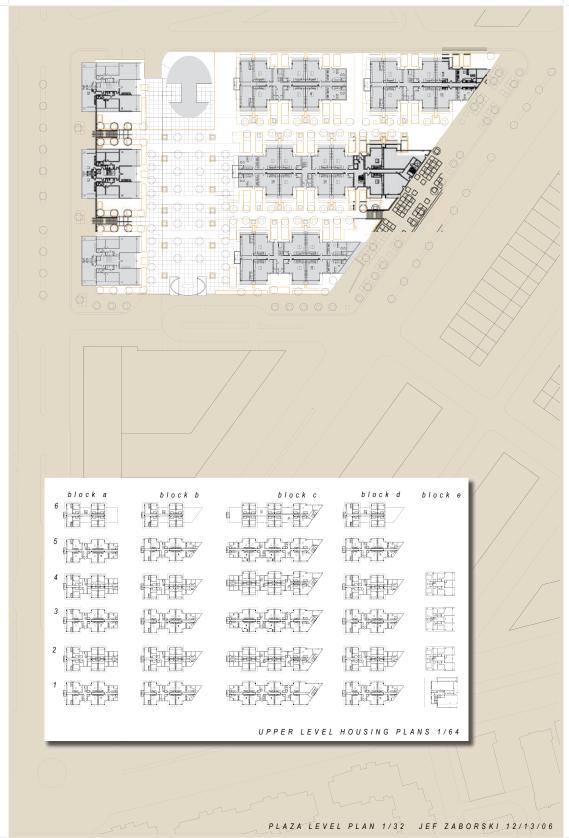


Figure 67

plaza level and upper floor plans



Figure 68

Bladensburg Road elevation



Figure 69

Bladensburg Road section



Figure 70 Neal Street elevation



Figure 71 Neal Street section

bedroom, two bedroom, and 3 bedroom units. The intent was to create a viable platform for a new community in the heart of Trinidad in Washington, DC.

The variety and breadth of challenges that Wal-Mart creates cannot all be explored on any one site. Indeed, most of the challenges we face cannot even be answered with architectural solutions. Architecture, though, can be a powerful tool for framing those questions, for shaping a necessary dialogue about the shape of the American economy and landscape.



Figure 72

plaza view



Figure 73

mews view

70

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