AGENDA
CARRBORO BOARD OF ALDERMEN
TUESDAY, SEPTEMBER 20, 1994
7:30 P.M., TOWN HALL BOARD ROOM

Approximate Time*

7:30 - 7:35 A. Approval of Minutes of Previous Meeting: September 13, 1994

7:35 - 7:45 B. Resolutions, Proclamations and Charges

7:45 - 7:55 C. Requests from Visitors and Speakers from the Floor

D. Public Hearings

7:55 - 8:55
P/15
7:47 - 8:45

(1) **Conditional Use Permit Request/Mixed Use Project/110 Brewer's Lane**

Brian and Donald Whittier have requested that the Board of Aldermen hold a public hearing on a conditional use permit request which would allow a mixed use project on 1.635 acres located at 110 Brewer's Lane. The administration recommends approval of the conditional use permit with conditions.

8:55 - 9:00
NP

(2) **Continuation of Public Hearing/Voluntary Annexation Request/400 Smith Level Road**

This is a continuation of a public hearing held on August 9, 1994, to consider a request from the N.C. Federation of Business and Professional Women's Club, Inc. to annex their property located at 400 Smith Level Road into the Carrboro town limits. The petitioner has requested that this public hearing be continued until their subdivision process is completed. The administration requests that the Board of Aldermen continue this public hearing until October 25, 1994.

9:00 - 9:10 BREAK

E. OTHER MATTERS

9:10 - 9:20
P/5

(1) **Request from Winsome Lane Subdivision**

The Board of Aldermen will receive a request from the Winsome Lane Homeowners Association to amend the town's Land Use Ordinance relating to the impervious surface requirements in the watershed. The administration requests that this matter be referred to the town staff for review in conjunction with a similar request from Carrboro Baptist Church.

9:20 - 9:35 (2) **Report on Origin Distribution of UNC Traffic**
P/5

The town staff will present a report on the volume of traffic destined for UNC which travels through Carrboro and what route is utilized most and request that the Board authorize the town staff to coordinate efforts with the UNC Department of Transportation in the creation and implementation of the Transportation Demand Management Plan.

9:35 - 9:45 (3) **Status Report on Park and Ride Lot**
P/5

The town staff will present a report on the current status of the Carrboro Park and Ride Lot at Carrboro Plaza.

9:45 - 9:55 F. MATTERS BY MANAGER

9:55 - 10:05 G. MATTERS BY TOWN ATTORNEY

10:05 - 10:15 H. MATTERS BY BOARD MEMBERS

***The times listed on the agenda are intended only as general indications. Citizens are encouraged to arrive at 7:30 p.m. as the Board of Aldermen at times considers items out of the order listed on the agenda.**

BOARD OF ALDERMEN

ITEM NO. D(1)

AGENDA ITEM ABSTRACT

MEETING DATE: Tuesday, September 20, 1994

SUBJECT: TO HOLD A PUBLIC HEARING to consider a conditional use permit request for a mixed use project at 110 Brewer's Lane

DEPARTMENT: PLANNING	PUBLIC HEARING: YES _X_ NO ___
ATTACHMENTS: Staff Report Summary of advisory board recommendations Advisory board recommendations Reduced Site Plan CUP worksheet	FOR INFORMATION CONTACT: Wayne King or Keith Lankford --968-7712
THE FOLLOWING INFORMATION IS PROVIDED: (X) Purpose (X) Action Requested (X) Analysis (X) Summary (X) Recommendation	

PURPOSE

Brian Whittier and Donald Whittier have requested that the Board of Aldermen hold a public hearing for the consideration of the issuance of a conditional use permit which would allow a mixed use project (USE CODE 27.000; 1.330 - Multi-Family Apartments and 6.110 - tae kwon do studio) on 1.635 acres located at 110 Brewer's Lane. The administration recommends approval of the project as presented with the attached recommendations found in the staff report.

SUMMARY

Donald and Brian Whittier have applied for a conditional use permit (CUP) that will allow a mixed use project (USE CODE 27.000; 1.330 - 16, Multi-Family Apartments, total 16,000 square feet and 6.110 - tae kwon do studio, 5,900 square feet) on 1.635 acres.

Streets

To conform with the Town's collector street standards, the plans show a dedication of one half of a sixty foot right of way from the centerline of the existing street. The street standard is a 34' wide street (back of curb to back of curb) and a 60' wide right of way. A sidewalk will be constructed at the south-east side of the property along the right of way of Brewer's Lane.

Water/sewer
A proposed OWASA easement has been added to accommodate future connection to OWASA services by neighboring properties.

Trees
Several large trees on this site will be protected from construction traffic and retained to aid in meeting the shading requirement of the ordinance. The orange tree protection fencing will have to be in place as specified by the plans prioir to beginning construction of this project. Preservation of the largest tree, a 72" oak, was discussed at depth during the joint review. The applicant agreed to mulch under the 72" oak tree and to limit the level of fill near this large tree even if this means amending the grade of the parking area near this tree.

Parking
The applicant has eliminated several parking spaces near the 72" oak tree and has added several spaces within the parking area that were once landscaped islands. The applicant has three motorcycle parking spaces and two bike racks on this site plan. The parking requirement of the land use ordinance has been adequately met by this plan.

Bike/pedestrian connection to Boyd Street
During initial staff review, staff suggested that the applicant attempt to acquire an easement from surrounding property owners for a bike/pedestrian connection to Boyd Street. As a result of this suggestion, the applicant has added a note to sheet L-1 of the plans that states, "that the applicant agrees to construct a bicycle path to Boyd Street if and when an easement is acquired by the town".

Phasing
The applicant wishes to phase this project. It is the desire of the applicant to construct the tae kwon do studio and associated parking near residential buildings number 2 and 3 as phase one. Either simultaniously or within six months the applicant wishes to complete the residential element or phase two of this project. This property is located north of the Libba Cotton Bike Path and along the first block of Brewer's Lane. The tract is currently zoned B1-G with the Residential High Density and Commercial Overlay RHDC zone. The lot is identified as tax map 92, block A, Lot 21.

ANALYSIS

See attached staff report

RECOMMENDATION

The Administration recommends approval of the project as presented with the attached recommendations found in the staff report.

ACTION REQUESTED

To approve the conditional use permit which would allow the construction of a mixed use development containing 16 multi-family apartments and a 5,900 square foot studio space for tae kwon do instruction.

STAFF REPORT

TO:	**Board of Aldermen**	
DATE:	**September 20, 1994**	
SUBJECT:	**To consider a conditional use permit request for a mixed use project at 110 Brewer's Lane**	
APPLICANT:	**Donald and Brian Whittier** **4901 Boulder Run Road** **Hillsborough, NC 27278**	
PURPOSE:	**To allow the construction of a mixed use development USE CODE 27.000; 1.330 - 16 multi-family apartments and 6.110 - studio for tae kwon do.**	
EXISTING ZONING:	**B1-G** with the Residential High Density and Commercial Overlay (RHDC) overlay zone	
TAX MAP:	**92.A.21**	
LOCATION:	**110 Brewer's Lane**	
SIZE:	**1.635 acres (71,221 square feet)**	
EXISTING LAND USE:	**Vacant, Single Family Dwelling Unit**	
SURROUNDING LAND USES:	**North:**	**B1-G: vacant, single family dwelling unit, 1.100 retail, 2.100 and office, 3.100**
	South:	**B1-G: vacant, and manufacturing, 4.100** **R-2: vacant and manufacturing, 4.200**
	East:	**B1-G: salvage yard, 11.000** **R-2: vacant**
	West:	**B1-G: restaurant, 8.500, car wash, 9.500**
ZONING HISTORY:	**1981 - 1985**	**M-1**
	1986-present	**B1-G (RHDC)**

RELEVANT ORDINANCE SECTIONS:

15-54	**Conditional Use Permits**
15-140	**Residential High Density and Commercial Overlay District**
15-154	**Combination Uses**
15-236	**Utility Ownership and Easement Rights**
15-242	**Lighting Requirement**
15-262	**Development Must Drain Properly**
15-291	**Number of Parking Spaces Required**
15-316	**Retention and Protection of Large Trees**
Article X	**Permissible Uses**
Article XIX	**Screening and Trees**
Appendix C	**Specifications for design and construction**
Appendix E	**Guide for Landscaping**

BACKGROUND:

Donald and Brian Whittier have applied for a conditional use permit that would allow the construction of 16, three bedroom multi-family units (16,000 total square feet) and a studio for tae kwon do (5,900 total square feet) on 1.635 acres. This property is located north of the Libba Cotton Bike Path at 110 Brewer's Lane. The tract is currently zoned B1-G with the Residential High Density and Commercial Overlay (RHDC) zone. The lot is identified as tax map 92, block A, lot 21. The applicant wishes to construct the studio and related parking as phase one and the residential units and the remaining parking as phase two.

Streets
To conform with the Town's collector street standards, the plans show a dedication of one half of a sixty foot right of way from the centerline of the existing street. The street standard is a 34' wide street (back of curb to back of curb) and a 60' wide right of way. A sidewalk will be constructed at the south-east side of the property along the right of way of Brewer's Lane.

Water/sewer
A proposed OWASA easement has been added to accommodate future connection to OWASA services by neighboring properties.

Trees
Several large trees on this site will be protected from construction traffic and retained to aid in meeting the shading requirement of the ordinance. The orange tree protection fencing will have to be in place as specified by the plans prior to beginning construction of this project. Preservation of the largest tree, a 72" oak, was discussed at depth during the joint review. The applicant agreed to mulch under the 72" oak tree and to limit the level of fill near this large tree even if this means amending the grade of the parking area near this tree.

Parking
The applicant has eliminated several parking spaces near the 72" oak tree and has added several spaces within the parking area that were once landscaped islands. The applicant has three motorcycle parking spaces and two bike racks on this site plan. The parking requirement of the land use ordinance has been adequately met by this plan.

Bike/pedestrian connection to Boyd Street
During initial staff review, staff suggested that the applicant attempt to acquire an easement from surrounding property owners for a bike/pedestrian connection to Boyd Street. As a result of this suggestion, the applicant has added a note to sheet L-1 of the plans that states, "that the applicant agrees to construct a bicycle path to Boyd Street if and when an easement is acquired by the town".

Phasing
The applicant wishes to phase this project. It is the desire of the applicant to construct the tae kwon do studio and associated parking near residential buildings number 2 and 3 as phase one. Either simultaneously or within six months the applicant wishes to complete the residential element or phase two of this project.

RECOMMENDATION:

Staff recommends approval of the permit with the following conditions:

1. **That the lighting plan be approved by the Police Chief prior to construction plan approval. (The plan as submitted has now been approved by the Police Chief, Ben Callahan).**

2. **That new curb and gutter be constructed along the applicant's portion of Brewer's Lane. Due to the location of the driveways at either end of the project, the ends of the curb and gutter section will flare to connect to the existing street.**

3. **That the owner record covenants on the property guaranteeing access by the tenants of the apartments to the weight room which is to be constructed in the tae kwon do studio. These covenants shall be reviewed and approved by the Town Attorney. Such access shall be a continuing condition of this conditional use permit.**

Brewer's Lane, Mixed Use Conditional Use Permit

Summary of the staff and advisory board recommendations

S,AC,PB,TAB	1.	That the lighting plan be approved by the Police Chief prior to construction plan approval. (The plan as submitted has now been approved by the Police Chief, Ben Callahan).
S,AC,PB,TAB	2.	That new curb and gutter be constructed along the applicant's portion of Brewer's Lane. Due to the location of the driveways at either end of the project, the ends of the curb and gutter section will flare to connect to the existing street.
S,AC,PB,TAB	3.	That the owner record covenants on the property guaranteeing access by the tenants of the apartments to the weight room which is to be constructed in the tae kwon do studio. These covenants shall be reviewed and approved by the Town Attorney. Such access shall be a continuing condition of this conditional use permit.
AC	4.	That the applicant mulch the area under the 72" oak, use light poles that are no higher than 15', and use caution when selecting the white Indian Hawthorn.
PB	5.	That all necessary modifications are made to accommodate removal of the proposed fill section around the existing 72" white oak tree to its drip line, which may mean changing the grade of the parking area.
TAB	6.	That with the addition of relocating a handicapped parking spot to access Building Number One on the Brewer site plan.

Town of Carrboro / Carrboro Appearance Commission / Carrboro, North Carolina 27510

APPEARANCE COMMISSION

RECOMMENDATION

Thursday, September 1, 1994

110 Brewer's Lane - mixed use project

Mary Cameron moved that the project be accepted as presented with the three following recommendations: 1)That the applicant mulch the area under the 72" oak, 2) use light poles that are no higher than 15', 3) use caution when selecting the white Indian Hawthorn. Wendy Wenck seconded the motion. The vote was: Ayes, four (4); Giles Blunden, Mary Cameron, Marobeth Ruegg, and Wendy Wenck; Noes, zero (0); Absent/excused, five (5); John Dunkle, Ann Leonard, Brother Peacemaker, John Van Fleet, and Liaison, Jay Bryan.

Giles Blunden 9/1/94

Giles Blunden, Chair, Appearance Commission 9/1/94

TOWN OF CARRBORO
PLANNING BOARD RECOMMENDATION
September 01, 1994

110 BREWER'S LANE - CONDITIONAL USE PERMIT REQUEST

MOTION WAS MADE BY M.C. RUSSELL AND SECONDED BY DAN LEONARD TO RECOMMEND THAT THE BOARD OF ALDERMEN APPROVE THE CONDITIONAL USE PERMIT REQUEST AS PRESENTED WITH ONE REQUIREMENT IMPOSED:

> That all necessary modifications are made to accommodate removal of the proposed fill section around the existing 72" White Oak tree to its drip line, which may mean changing the grade in the parking area.

The foregoing recommendation, having been submitted to a vote, received the following vote this 1st day of September, 1994:

AYES: 8 (Leonard, Rodemeir, Russell, Cheek, High, Cohen, Rintoul, Richardson).
NOES: 0
ABSENT/EXCUSED: 2 (Sally Efird and Robin Lackey*).

*Note: Robin Lackey was present for the Planning Board meeting, however, she excused herself from being present during the Planning Board's discussion and vote on this item.

Lisa Bloom-Pruitt for
John Rintoul 09-01-94

John Rintoul, Vice-Chair date

Interoffice Memo

Date: 09/06/94

To: Keith Lankford, Zoning Administrator

From: Kenneth W. Withrow, Planning Department KWW

Subject: Brewer Lane - TAB Recommendation

Mr. Richard Laudati recommended that the TAB accept the Brewer Lane Project with staff recommendations. Ms. Dazzie Lane seconded the motion. Ms. Heidi Perry amended the motion to include, "with the addition of relocating a handicapped parking spot to access Building Number One on the Brewer Lane site plan". Ms. Ellen Perry seconded the motion.

Vote: Ayes - (Lane, Laudati, Mochel, E. Perry, H. Perry, Taylor, Zaffron)

Noes - (None)

KWW

Alex Zaffron/KWW Sept 7, 1994

RECOMMENDATION

FROM: DOWNTOWN DEVELOPMENT COMMISSION

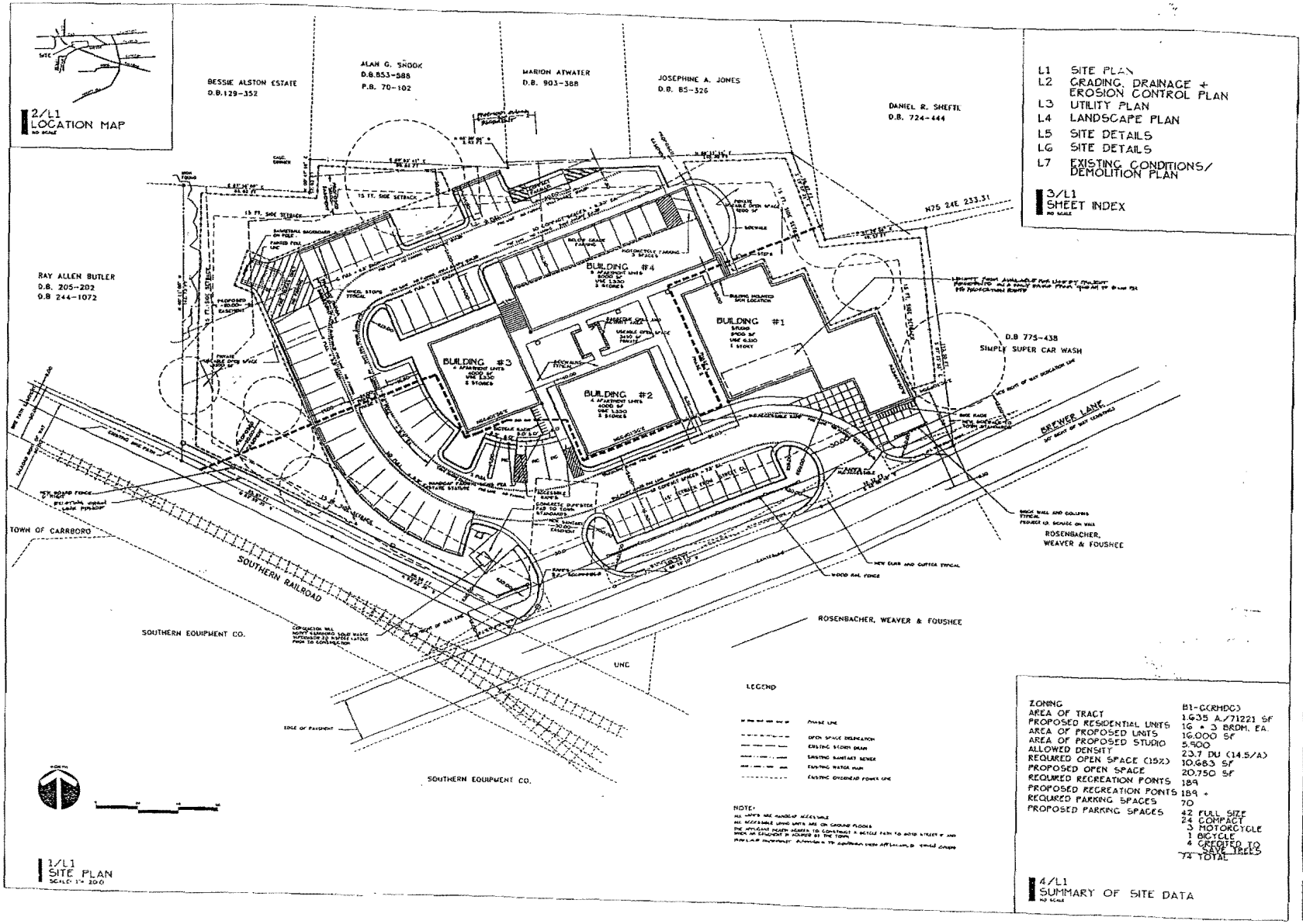
SUBJECT: CONDITIONAL USE PERMIT REQUEST FOR A MIXED USE PROJECT AT 110 BREWER LANE

The Downtown Development Commission met and reviewed the plans for this mixed use project. The DDC is excited about the possibility of development on Brewer Lane, particularly development the involves residential and commercial type uses. Residential uses are important to the vitality of the downtown and should be encouraged when ever possible.

There was some slight concern about the pedestrian traffic going across the project, however it was understood that the traffic already exist.

Marianne Fiorentino, Chair

Marianne Fiorentino/JRH



2/L1
LOCATION MAP
NO SCALE

1/L1
SITE PLAN
SCALE: 1" = 20'-0"

L1 SITE PLAN
L2 GRADING, DRAINAGE + EROSION CONTROL PLAN
L3 UTILITY PLAN
L4 LANDSCAPE PLAN
L5 SITE DETAILS
L6 SITE DETAILS
L7 EXISTING CONDITIONS/ DEMOLITION PLAN

3/L1
SHEET INDEX
NO SCALE

ZONING	B1-CORMDCI
AREA OF TRACT	1.635 A./71221 SF
PROPOSED RESIDENTIAL UNITS	16 + 3 BRDM. EA.
AREA OF PROPOSED UNITS	16,000 SF
AREA OF PROPOSED STUDIO	5,900
ALLOWED DENSITY	23.7 DU (14.5/A)
REQUIRED OPEN SPACE (15%)	10,683 SF
PROPOSED OPEN SPACE	20,750 SF
REQUIRED RECREATION POINTS	189
PROPOSED RECREATION POINTS	189 +
REQUIRED PARKING SPACES	70
PROPOSED PARKING SPACES	42 FULL SIZE 24 COMPACT 3 MOTORCYCLE 1 BICYCLE 4 CREDITED TO SAVE TREES 74 TOTAL

4/L1
SUMMARY OF SITE DATA
NO SCALE

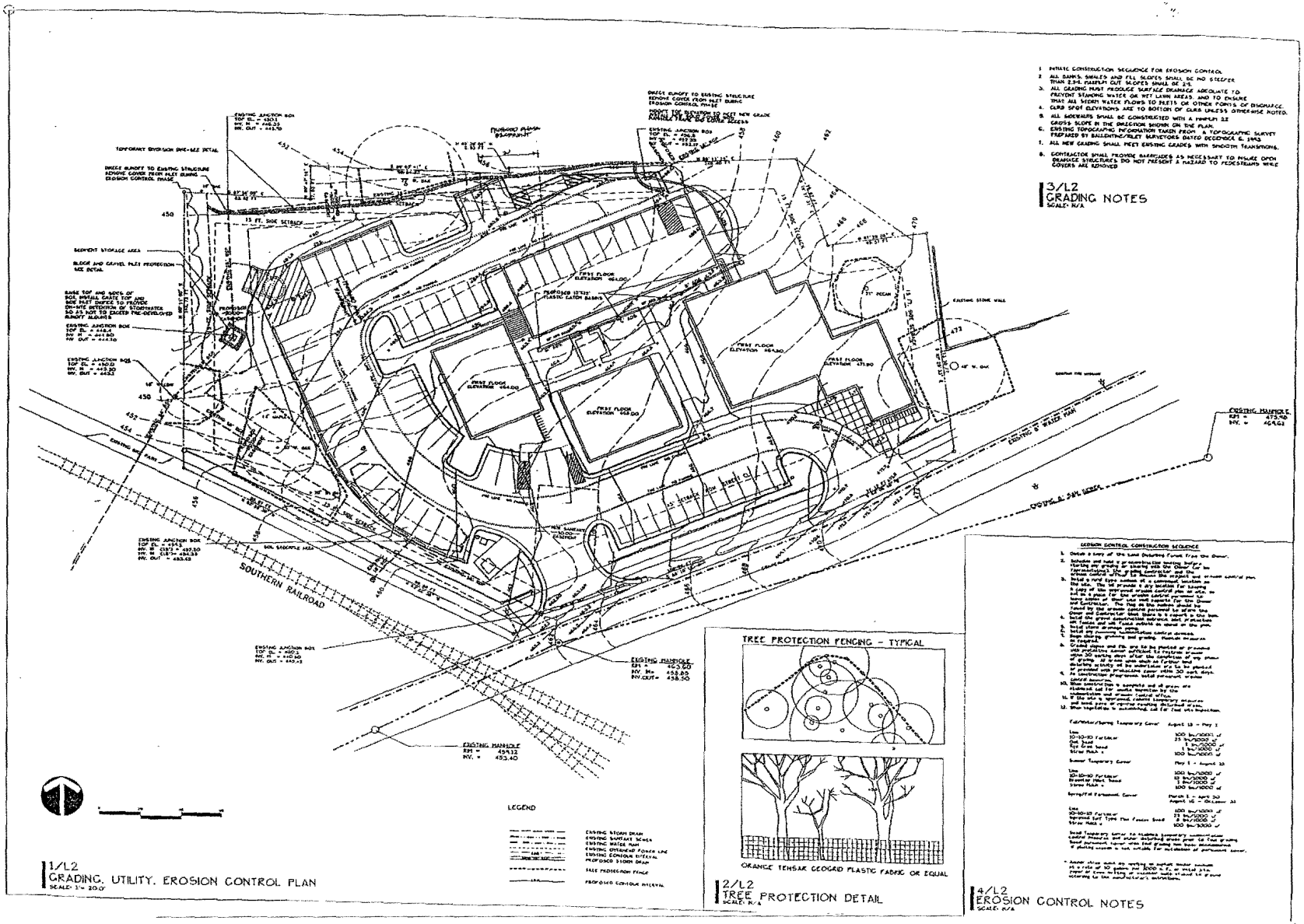
Young · Jewell + Associates, PA
Landscape Architects
Land Planners

D.O. TISE ARCHITECTS
CIVIL CONSULTANTS, INC.
FREEHOLD SURVEYORS

BREWER LANE MIXED USE COMPLEX
110 BREWER LANE
DONALD + BRIAN WHITTIER
7-182.A.21

SITE PLAN

L 1



1/L2
GRADING, UTILITY, EROSION CONTROL PLAN
SCALE: 1" = 20'-0"

1. INITIATE CONSTRUCTION SEQUENCE FOR EROSION CONTROL.
2. ALL BANKS, SWALES AND FILL SLOPES SHALL BE NO STEEPER THAN 2:1H, EXCEPT CUT SLOPES SHALL BE 1:1.
3. ALL GRADING MUST PRODUCE SURFACE DRAINAGE ADEQUATE TO PREVENT STANDING WATER OR WET LAWN AREAS, AND TO ENSURE THAT ALL STORM WATER FLOWS TO INLETS OR OTHER POINTS OF DISCHARGE.
4. CURB SPOT ELEVATIONS ARE TO BOTTOM OF CURB UNLESS OTHERWISE NOTED.
5. ALL SIDEWALKS SHALL BE CONSTRUCTED WITH A MINIMUM 2% CROSS SLOPE IN THE DIRECTION SHOWN ON THE PLAN.
6. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY BALLENTINE/RILEY SURVEYORS DATED DECEMBER 6, 1993.
7. ALL NEW GRADING SHALL MEET EXISTING GRADES WITH SMOOTH TRANSITIONS.
8. CONTRACTOR SHALL PROVIDE BARRICADES AS NECESSARY TO INSURE OPEN DRAINAGE STRUCTURES DO NOT PRESENT A HAZARD TO PEDESTRIANS WHEN COVERS ARE REMOVED

3/L2
GRADING NOTES
SCALE: N/A

TREE PROTECTION FENCING - TYPICAL

ORANGE TENSAR GEOGRID PLASTIC FABRIC OR EQUAL

2/L2
TREE PROTECTION DETAIL
SCALE: N/A

EROSION CONTROL CONSTRUCTION SEQUENCE

4/L2
EROSION CONTROL NOTES
SCALE: N/A

Young · Jewell + Associates, PA
Landscape Architects
Land Planners

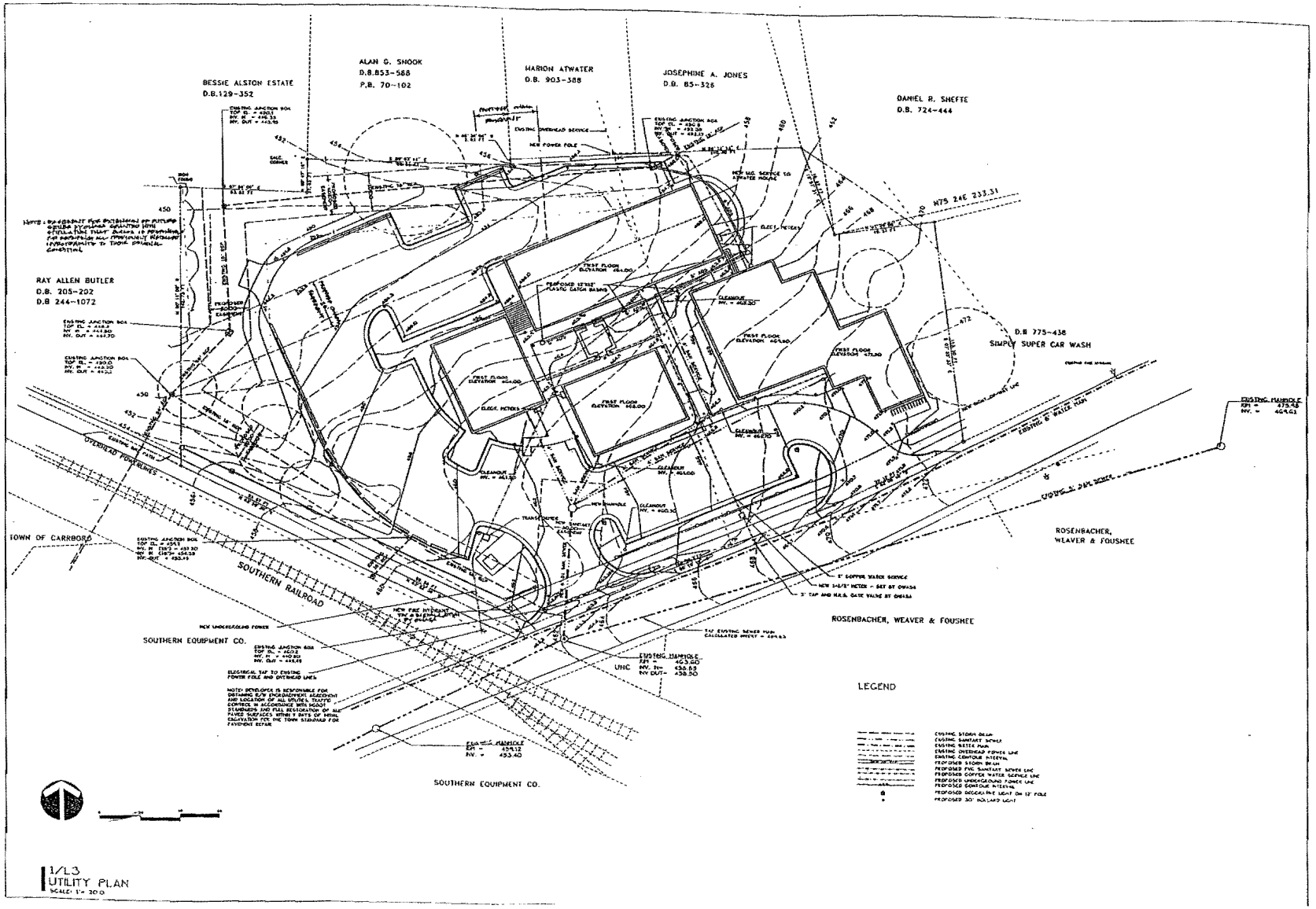
PROJECT ARCHITECT D.O. TISE ARCHITECTS
PROJECT OWNER CIVIL CONSULTANTS, INC.
PROJECT SURVEYOR FREEHOLD SURVEYORS

BREWER LANE MIXED USE COMPLEX 110 BREWER LANE
DONALD + BRIAN WHITTIER
4901 BOLDER ROAD
MULBOROUGH, NC 27576

GRADING, DRAINAGE + EROSION CONTROL PLAN

DATE: AUGUST 23, 1994
REV: AUGUST 23, 1994 ADDED NOTES

SHEET NO. L 2



Young · Jewell + Associates, PA
Landscape Architects
Land Planners

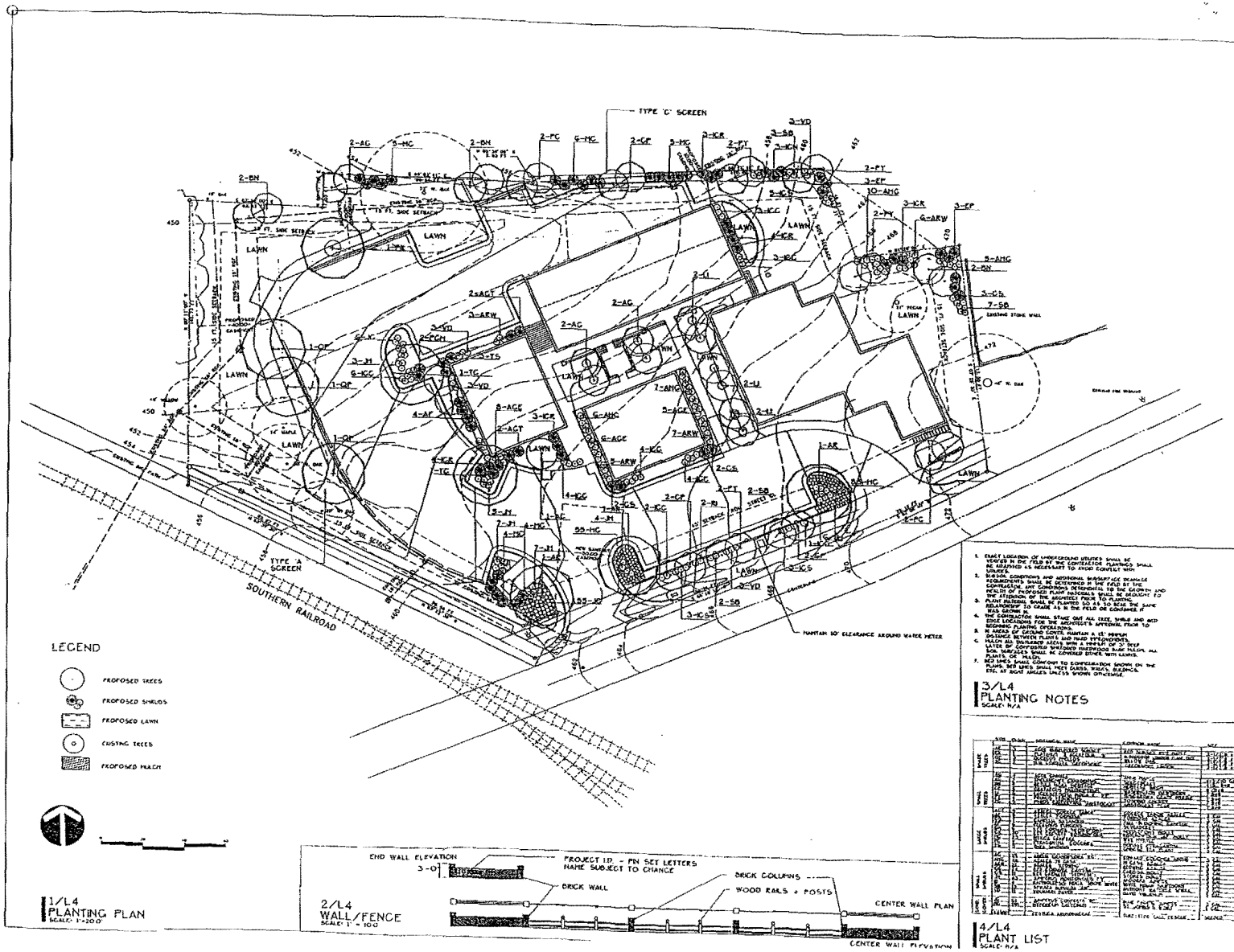
D.O. TISE ARCHITECTS
CIVIL CONSULTANTS, INC.
FREEHOLD SURVEYORS

BREWER LANE MIXED USE COMPLEX
110 BREWER LANE
DONALD + BRIAN WHITTIER
4401 BOLDER RUN ROAD
HILLSBOROUGH, NC 27278

UTILITY PLAN

1

2



1/L4
PLANTING PLAN
SCALE: 1"=20'-0"

2/L4
WALL/FENCE
SCALE: 1" = 10'-0"

3/L4
PLANTING NOTES
SCALE: N/A

4/L4
PLANT LIST
SCALE: N/A

Young · Jewell + Associates, PA
Landscape Architects
Land Planners

D.O. TISE ARCHITECTS
CIVIL CONSULTANTS, INC.
FREEHOLD SURVEYORS

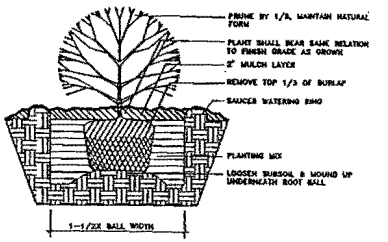
BREWER LANE MIXED USE COMPLEX
110 BREWER LANE

DONALD + BRIAN WHITTIER
401 BOULDER RUN ROAD
MILLBOROUGH, NC 27276

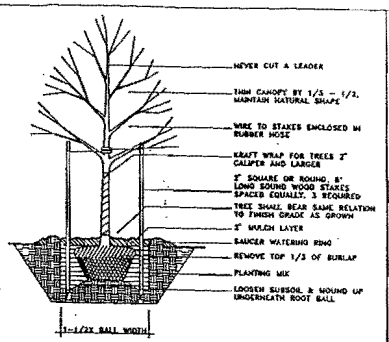
7.02.21

PLANTING PLAN

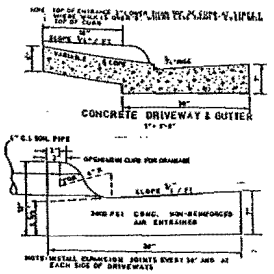
L 4



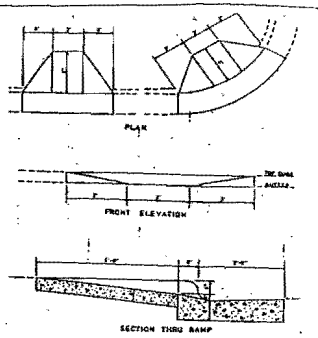
1/L5
SHRUB PLANTING
SCALE: NTS



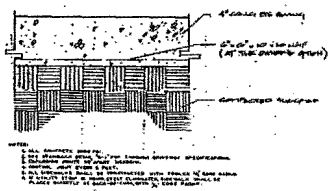
2/L5
TREE PLANTING
SCALE: NTS



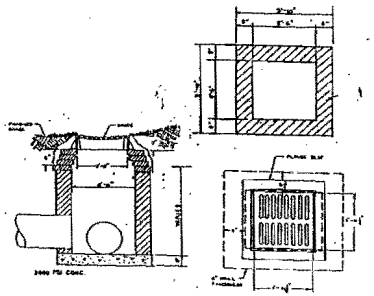
3/L5
CURB + GUTTER SECTION
SCALE: NTS



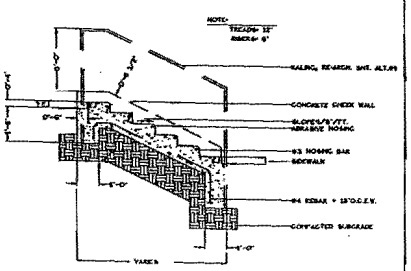
4/L5
HANDICAP RAMP
SCALE: NTS



5/L5
SIDEWALK SECTION
SCALE: NTS



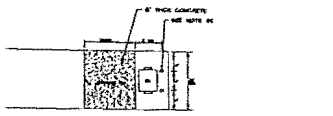
6/L5
CATCH BASIN + TOP GRATE
SCALE: NTS



7/L5
CONCRETE STAIRS
SCALE: NTS

8/L5
CHEEK WALL
SCALE: NTS

9/L5
BITUMINOUS PAVEMENT
SCALE:



10/L5
DUMPSTER PAD
SCALE:

11/L5
SCALE:

12/L5
SCALE:

Young • Jewell + Associates, PA
Landscape Architects
Land Planners

D.O. TISE ARCHITECTS
CIVIL CONSULTANTS, INC.
FREEMOLD LAND SURVEYORS

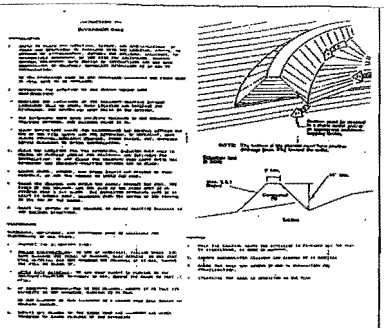
BREWER LANE MIXED USE COMPLEX
DONALD + BRIAN WHITTIER
306 WEST FRANKLIN STREET
CHAPEL HILL, NC 27516

7.02.A.21

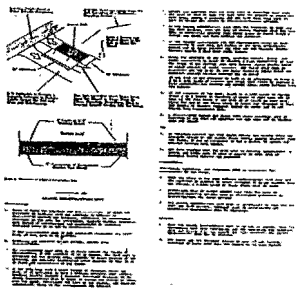
SITE DETAILS

MAY 16, 1994

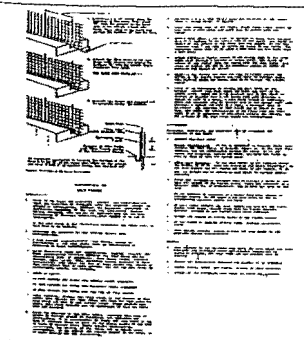
L 5



1/LG
DIVERSION DIKE
SCALE: NTS

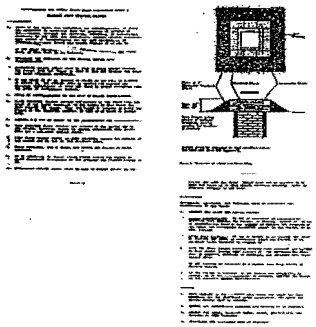


2/LG
GRAVEL CONSTRUCTION ENTRANCE
SCALE: NTS



3/LG
SILT FENCE
SCALE: NTS

4/LG
SCALE: NTS



5/LG
BLOCK + GRAVEL FILTER
SCALE: NTS

6/LG
DETAIL DESCRIPTION
SCALE: NTS

7/LG
DETAIL DESCRIPTION
SCALE: NTS

8/LG
DETAIL DESCRIPTION
SCALE: NTS

9/LG
DETAIL DESCRIPTION
SCALE: NTS

10/LG
DETAIL DESCRIPTION
SCALE: NTS

11/LG
DETAIL DESCRIPTION
SCALE: NTS

12/LG
DETAIL DESCRIPTION
SCALE: NTS

Young · Jewell + Associates, PA
Landscape Architects
Land Planners

D.O. TISE ARCHITECTS
CIVIL CONSULTANTS, INC.
BALLENTINE/RILEY

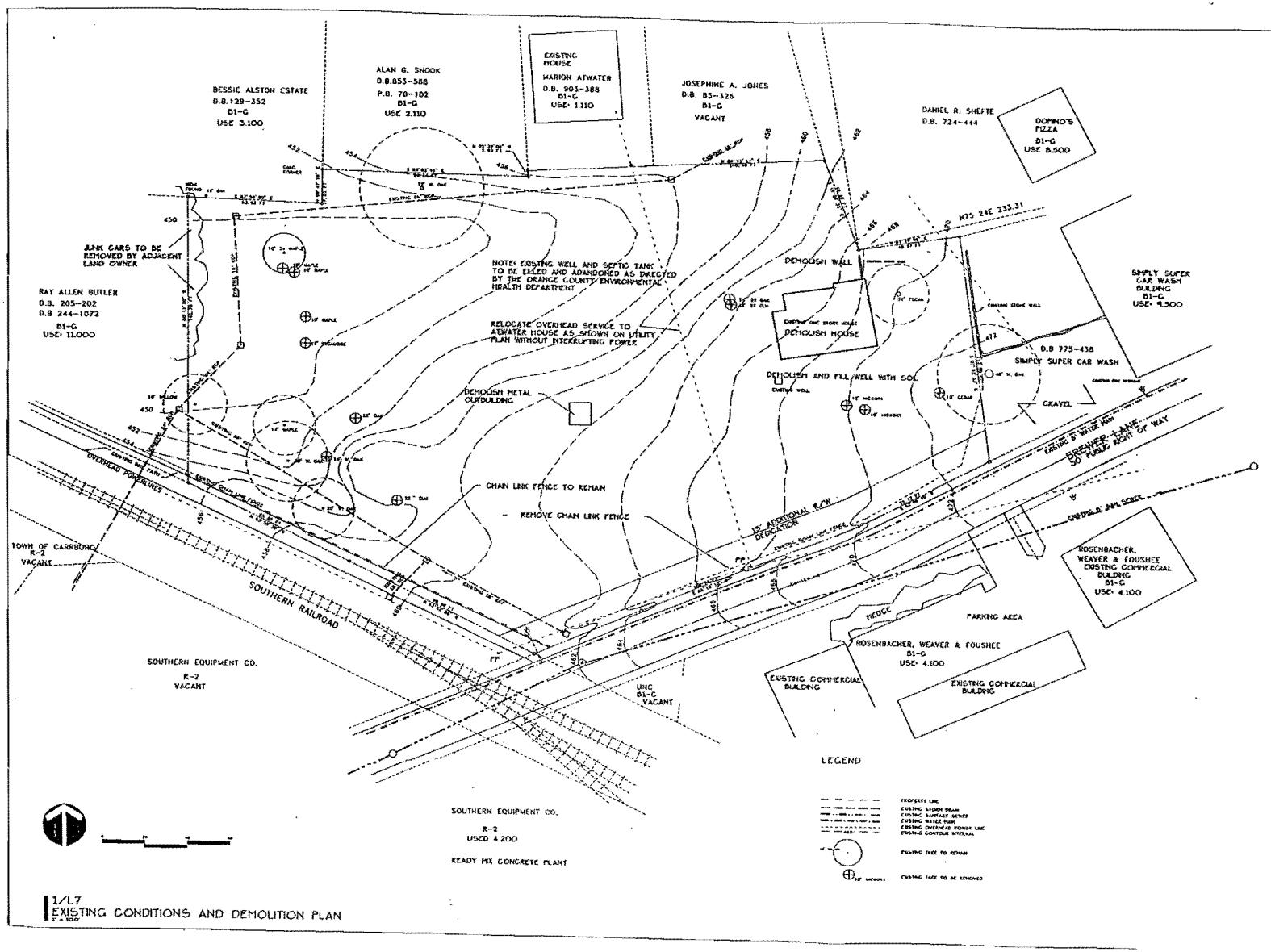
BREWER LANE MIXED USE COMPLEX

DONALD + BRIAN WHITTER
306 WEST FRANKLIN STREET
CHAPEL HILL, NC 27516

7.152.A.21

SITE DETAILS

1 of 6



1/L7
EXISTING CONDITIONS AND DEMOLITION PLAN
1" = 50'-0"

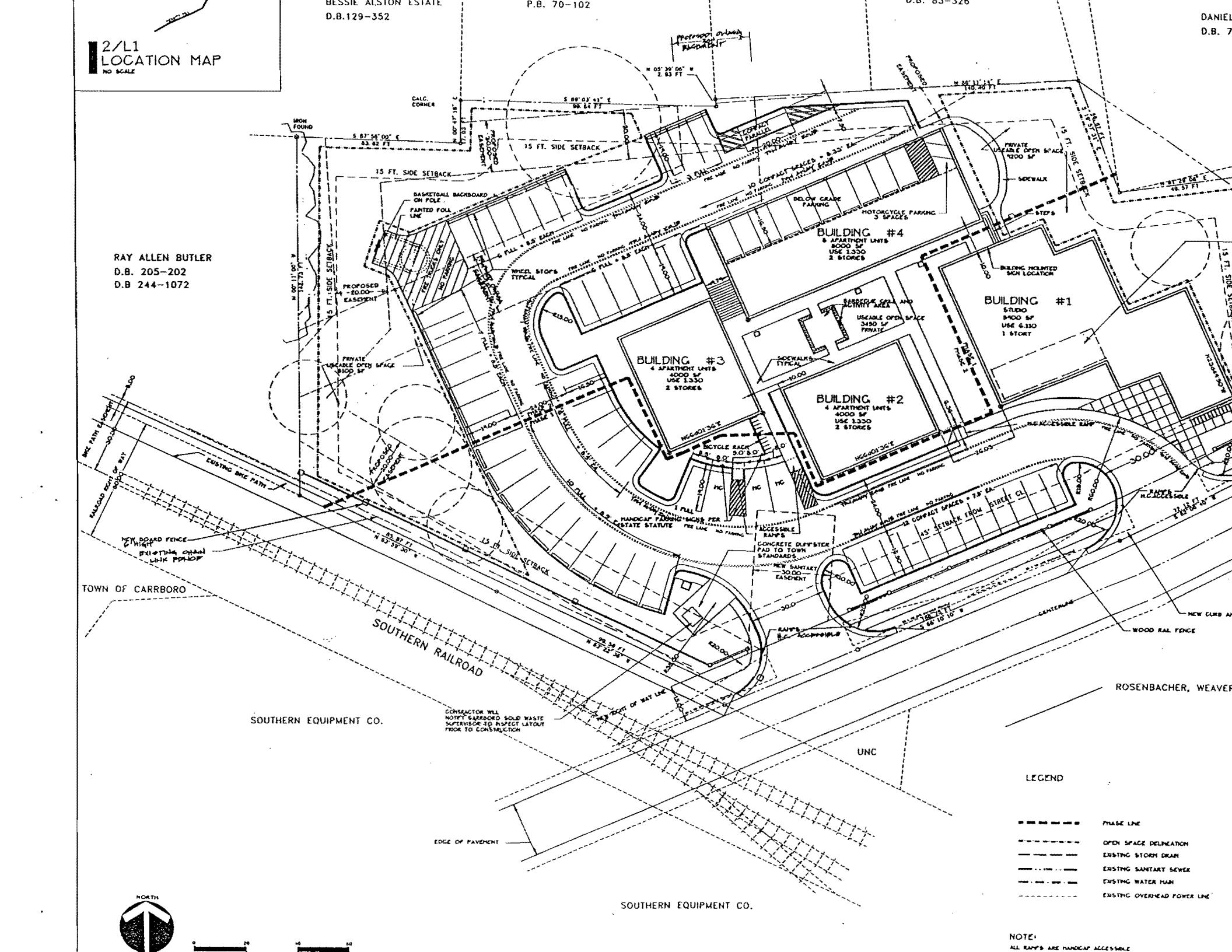
Young • Jewell + Associates, PA
Landscape Architects
Land Planners

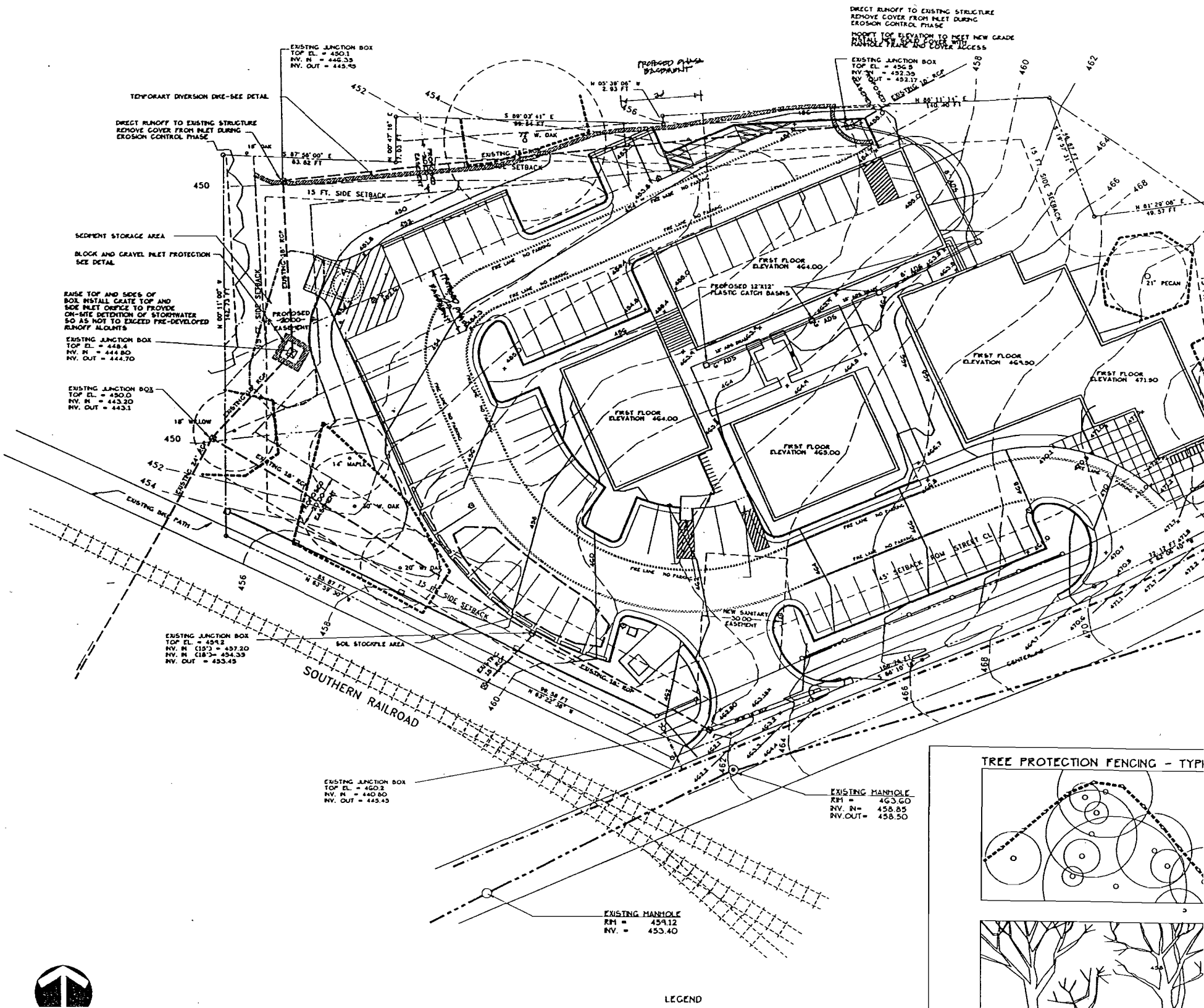
PROJECT ARCHITECT: D.O. TISE ARCHITECTS
PROJECT ENGR: CIVIL CONSULTANTS, INC.
PROJECT SURVEYOR: FREEHOLD SURVEYORS

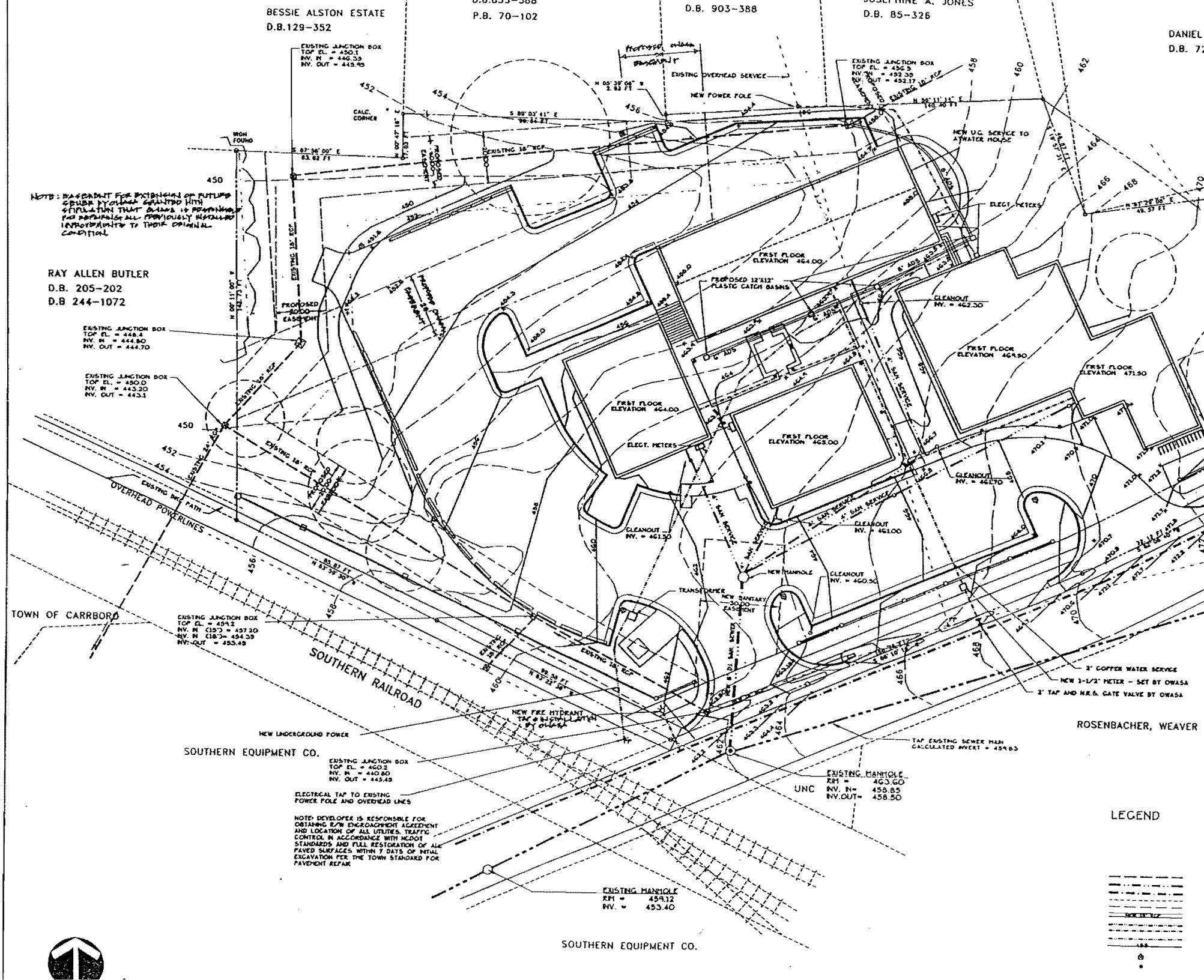
BREWER LANE MIXED USE COMPLEX
110 BREWER LANE
OWNER/DEVELOPER: DONALD + BRIAN WHITTIER
2401 EDLOCK RAY ROAD
HILLSBOROUGH NC 27278
7.02.A.21

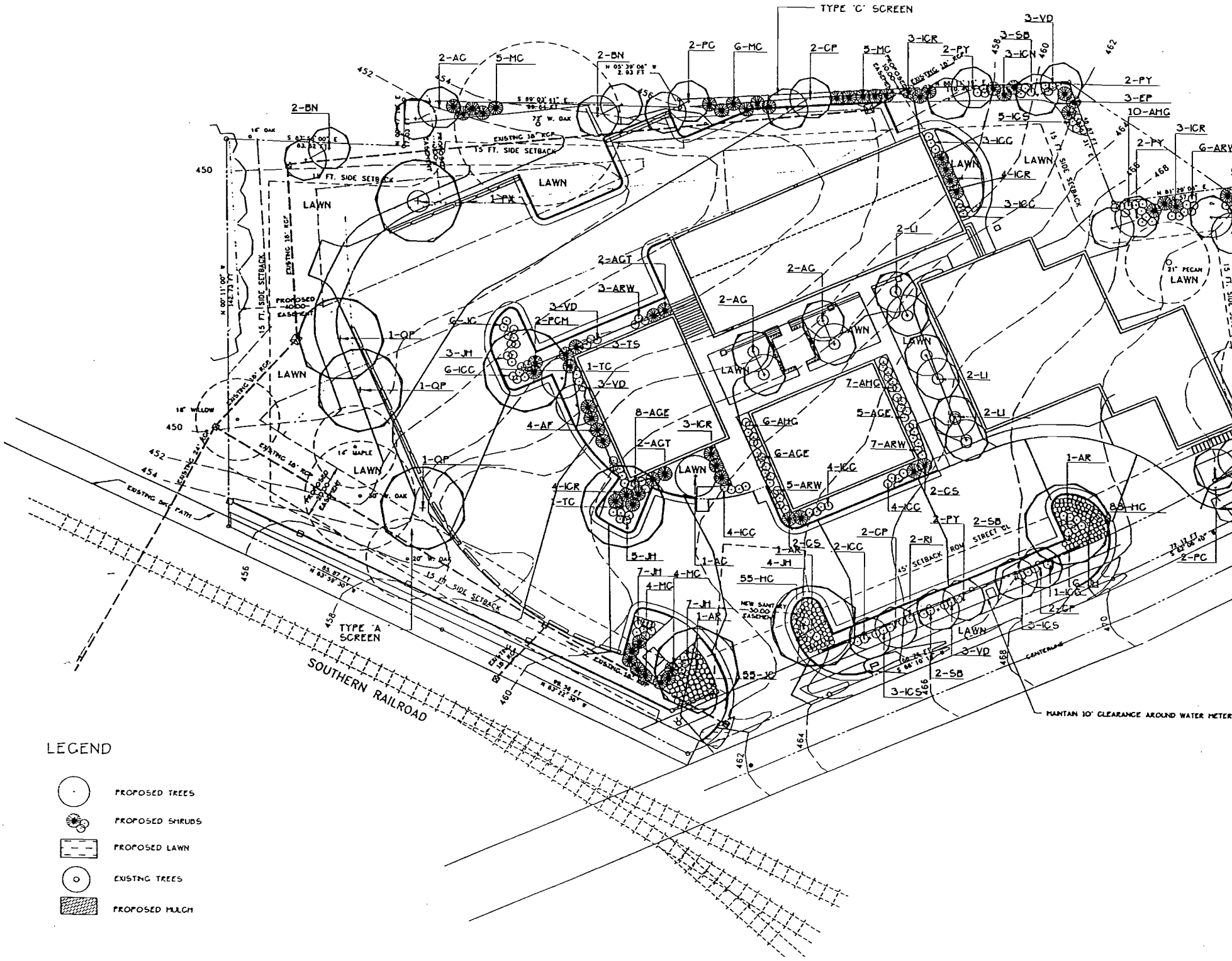
EXISTING CONDITIONS AND DEMOLITION PLAN

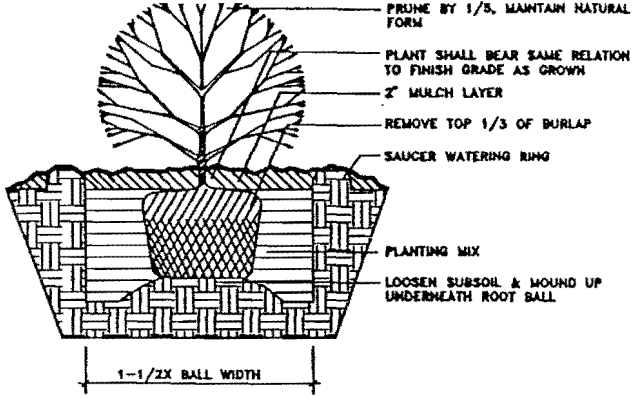
SHEET NO. L 7


2/L1
LOCATION MAP
NO SCALE
BESSIE ALSTON ESTATE
D.B.129-352
P.B. 70-102
D.B. 83-326
DANIEL
D.B. 7
RAY ALLEN BUTLER
D.B. 205-202
D.B 244-1072
BUILDING #1
STUDIO
3400 SF
USE 6.330
1 STORY
BUILDING #2
4 APARTMENT UNITS
4000 SF
USE 1.330
2 STORES
BUILDING #3
4 APARTMENT UNITS
4000 SF
USE 1.330
2 STORES
BUILDING #4
8 APARTMENT UNITS
8000 SF
USE 1.330
2 STORES
15 FT. SIDE SETBACK
PROPOSED 20.00' EASEMENT
PRIVATE USEABLE OPEN SPACE
SIDEWALK
BELOW GRADE PARKING
MOTORCYCLE PARKING 3 SPACES
BARBECUE GRILL AND SEATING AREA
USEABLE OPEN SPACE 3450 SF PRIVATE
SIDEWALKS TYPICAL
BUILDING MOUNTED SIGN LOCATION
BASKETBALL BACKBOARD ON POLE
PAINTED FOUL LINE
WHEEL STOPS TYPICAL
FIRE TRUCKS ONLY
NO PARKING
FIRE LANE
BICYCLE RACK
HANDICAP PARKING SIGNS PER G.S. STATE STATUTE
ACCESSIBLE RAMPS
CONCRETE DUMPSTER PAD TO TOWN STANDARDS
NEW SANITARY 30.00' EASEMENT
45' SETBACK FROM STREET CL
WOOD RAIL FENCE
NEW CURB AND GUTTER
CENTERLINE
EXISTING BIKE PATH
BIKE PATH EASEMENT
RAILROAD RIGHT OF WAY
NEW BOARD FENCE 6' HIGH
EXISTING CHAIN LINK FENCE
TOWN OF CARRBORO
SOUTHERN RAILROAD
SOUTHERN EQUIPMENT CO.
CONTRACTOR WILL NOTIFY CARRBORO SOLID WASTE SUPERVISOR TO INSPECT LAYOUT PRIOR TO CONSTRUCTION
EDGE OF PAVEMENT
ROSENBACHER, WEAVER
UNC
IRON FOUND
CALC. CORNER
LEGEND
PHASE LINE
OPEN SPACE DELINEATION
EXISTING STORM DRAIN
EXISTING SANITARY SEWER
EXISTING WATER MAIN
EXISTING OVERHEAD POWER LINE
NORTH
NOTE:
ALL RAMPS ARE HANDICAP ACCESSIBLE

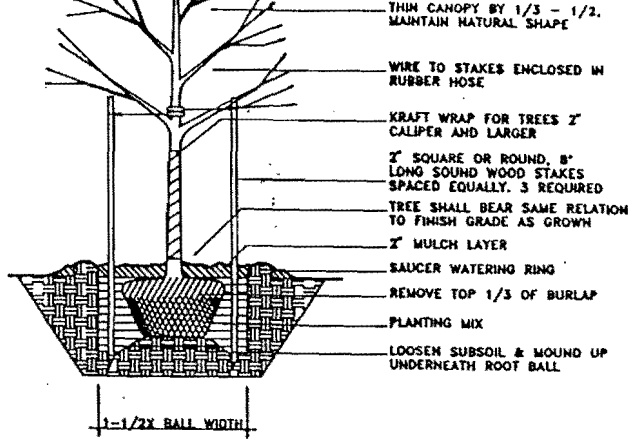

DIRECT RUNOFF TO EXISTING STRUCTURE
REMOVE COVER FROM INLET DURING
EROSION CONTROL PHASE
MODIFY TOP ELEVATION TO MEET NEW GRADE
INSTALL NEW SOLID COVER WITH
MANHOLE FRAME AND COVER (LOCKS
EXISTING JUNCTION BOX
TOP EL. = 450.1
INV. IN = 446.35
INV. OUT = 446.95
TEMPORARY DIVERSION DIKE-SEE DETAIL
DIRECT RUNOFF TO EXISTING STRUCTURE
REMOVE COVER FROM INLET DURING
EROSION CONTROL PHASE
EXISTING JUNCTION BOX
TOP EL. = 456.8
INV. = 452.35
INV. OUT = 452.17
EXISTING 18" RCP
EXISTING 15" RCP
15 FT. SIDE SETBACK
SEDIMENT STORAGE AREA
BLOCK AND GRAVEL INLET PROTECTION
SEE DETAIL
RAISE TOP AND SIDES OF
BOX INSTALL GRATE TOP AND
SIDE INLET ORIFICE TO PROVIDE
ON-SITE DETENTION OF STORMWATER
SO AS NOT TO EXCEED PRE-DEVELOPED
RUNOFF ALOUNTS
EXISTING JUNCTION BOX
TOP EL. = 448.4
INV. IN = 444.80
INV. OUT = 444.70
EXISTING JUNCTION BOX
TOP EL. = 450.0
INV. IN = 443.20
INV. OUT = 443.1
PROPOSED 20.00' EASEMENT
PROPOSED 12"X12" PLASTIC CATCH BASINS
FIRST FLOOR ELEVATION 464.00
FIRST FLOOR ELEVATION 465.00
FIRST FLOOR ELEVATION 464.50
FIRST FLOOR ELEVATION 471.50
NEW SANITARY 30.00' EASEMENT
45' SETBACK FROM STREET CL
EXISTING BIKE PATH
SOIL STOCKPILE AREA
SOUTHERN RAILROAD
EXISTING JUNCTION BOX
TOP EL. = 454.2
INV. IN (15") = 437.20
INV. IN (18") = 434.33
INV. OUT = 433.45
EXISTING JUNCTION BOX
TOP EL. = 460.2
INV. IN = 440.80
INV. OUT = 445.45
EXISTING MANHOLE
RIM = 463.60
INV. IN= 458.85
INV.OUT= 458.50
EXISTING MANHOLE
RIM = 459.12
INV. = 453.40
TREE PROTECTION FENCING - TYPI
LEGEND


BESSIE ALSTON ESTATE
D.B.129-352
P.B. 70-102
D.B. 903-388
JOSEPHINE A. JONES
D.B. 85-326
DANIEL
D.B. 72
RAY ALLEN BUTLER
D.B. 205-202
D.B 244-1072
TOWN OF CARRBORO
SOUTHERN RAILROAD
SOUTHERN EQUIPMENT CO.
SOUTHERN EQUIPMENT CO.
UNC
ROSENBACHER, WEAVER
OVERHEAD POWERLINES
EXISTING JUNCTION BOX
TOP EL. = 450.1
INV. IN = 446.35
INV. OUT = 445.95
EXISTING OVERHEAD SERVICE
NEW POWER POLE
NEW U.G. SERVICE TO ATWATER HOUSE
ELECT. METERS
FIRST FLOOR ELEVATION 464.00
PROPOSED 12"X12" PLASTIC CATCH BASINS
CLEANOUT INV. = 462.30
FIRST FLOOR ELEVATION 464.90
FIRST FLOOR ELEVATION 471.50
FIRST FLOOR ELEVATION 463.00
CLEANOUT INV. = 461.70
CLEANOUT INV. = 461.50
CLEANOUT INV. = 461.00
CLEANOUT INV. = 460.90
NEW MANHOLE
TRANSFORMER
NEW SANITARY SEWER EASEMENT
EXISTING JUNCTION BOX
TOP EL. = 448.4
INV. IN = 444.80
INV. OUT = 444.70
EXISTING JUNCTION BOX
TOP EL. = 450.0
INV. IN = 443.20
INV. OUT = 443.1
EXISTING JUNCTION BOX
TOP EL. = 459.2
INV. IN (12") = 437.20
INV. IN (18") = 434.38
INV. OUT = 433.48
EXISTING JUNCTION BOX
TOP EL. = 460.2
INV. IN = 440.80
INV. OUT = 440.48
ELECTRICAL TAP TO EXISTING POWER POLE AND OVERHEAD LINES
NEW UNDERGROUND POWER
NEW FIRE HYDRANT TAP & INSTALLATION BY OWASA
TAP EXISTING SEWER MAIN CALCULATED INVERT = 459.63
EXISTING MANHOLE
RIM = 463.60
INV. IN= 458.85
INV.OUT= 458.50
EXISTING MANHOLE
RIM = 459.12
INV. = 453.40
3" COPPER WATER SERVICE
NEW 1-1/2" METER - SET BY OWASA
2" TAP AND M.R.S. GATE VALVE BY OWASA
EXISTING 36" RCP
EXISTING 18" RCP
EXISTING 12" RCP
EXISTING 24" RCP
EXISTING 15" RCP
PROPOSED 20.00' EASEMENT
EXISTING PATH
IRON FOUND
CALC. CORNER
NOTE: DEVELOPER IS RESPONSIBLE FOR OBTAINING R/W ENCROACHMENT AGREEMENT AND LOCATION OF ALL UTILITIES. TRAFFIC CONTROL IN ACCORDANCE WITH NCDOT STANDARDS AND FULL RESTORATION OF ALL PAVED SURFACES WITHIN 7 DAYS OF INTIAL EXCAVATION PER THE TOWN STANDARD FOR PAVEMENT REPAIR
LEGEND

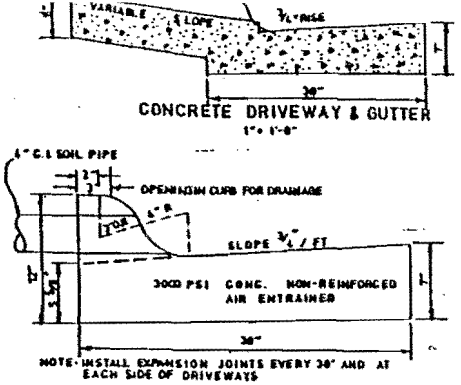

TYPE 'C' SCREEN
TYPE 'A' SCREEN
SOUTHERN RAILROAD
LAWN
MAINTAIN 10' CLEARANCE AROUND WATER METER
LEGEND
PROPOSED TREES
PROPOSED SHRUBS
PROPOSED LAWN
EXISTING TREES
PROPOSED MULCH



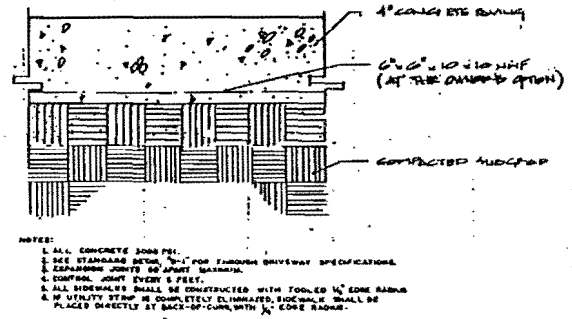
1/L5
SHRUB PLANTING
SCALE: NTS



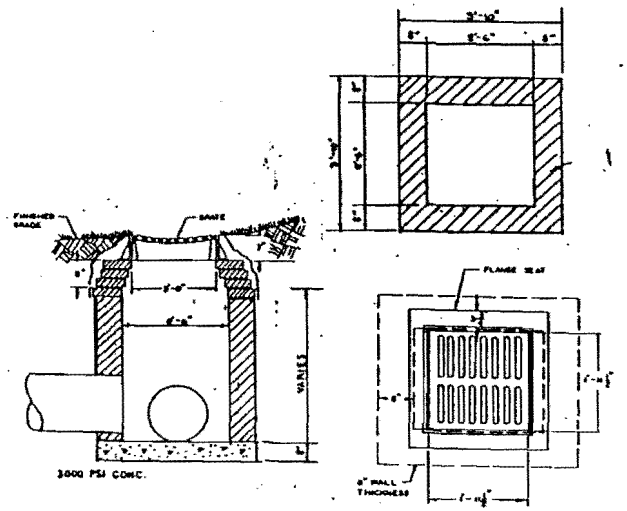
2/L5
TREE PLANTING
SCALE: NTS



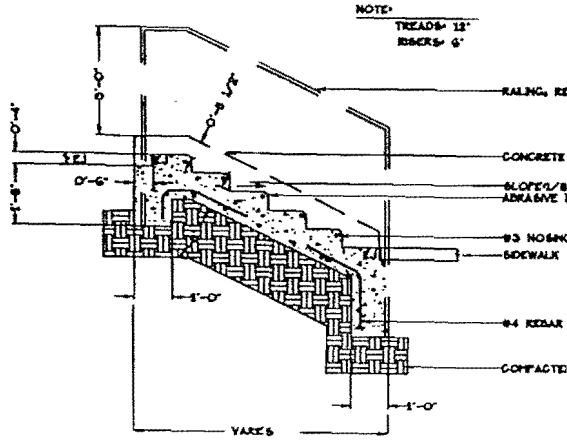
3/L5
CURB + GUTTER SECTION
SCALE: NTS



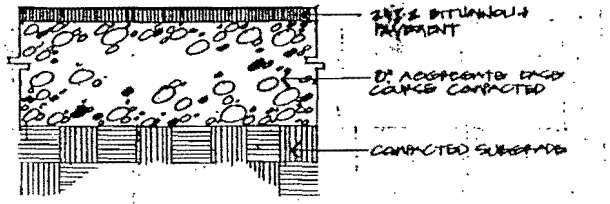
5/L5
SIDEWALK SECTION
SCALE: NTS

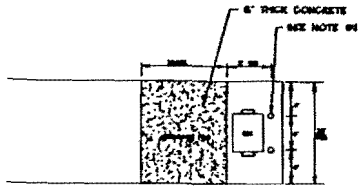


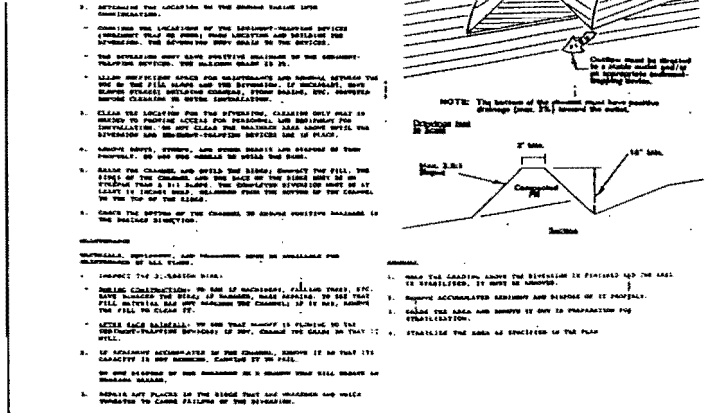
6/L5
CATCH BASIN + TOP GRATE
SCALE: NTS



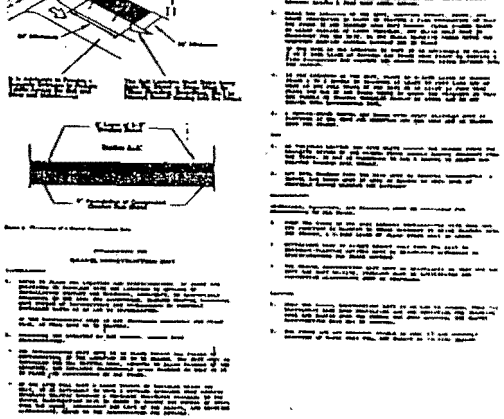
7/L5
CONCRETE STAIRS
SCALE: NTS



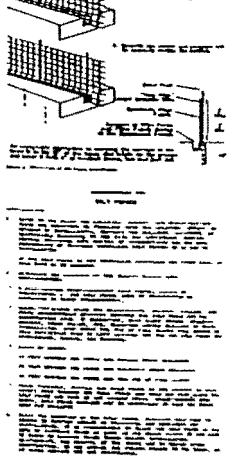




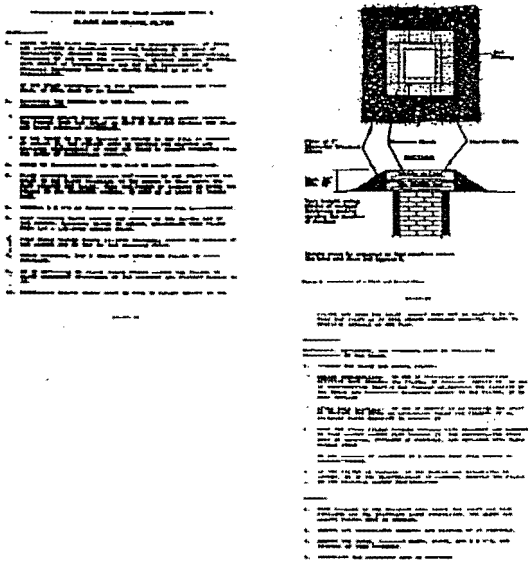
1/LG
DIVERSION DIKE
SCALE: NTS



2/LG
GRAVEL CONSTRUCTION ENTRANCE
SCALE: NTS



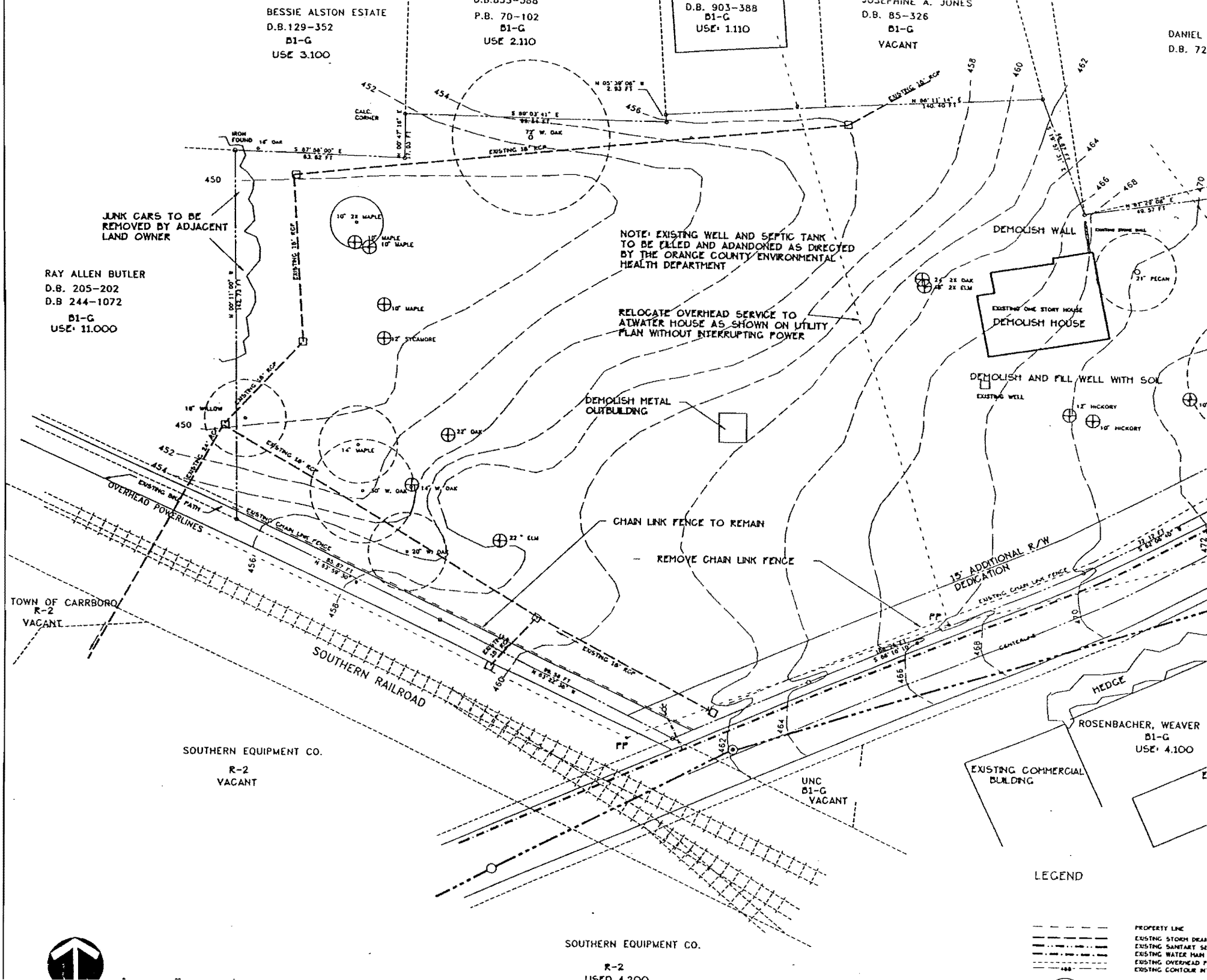
3/LG
SILT FENCE
SCALE: NTS



5/LG
BLOCK + GRAVEL FILTER
SCALE: NTS

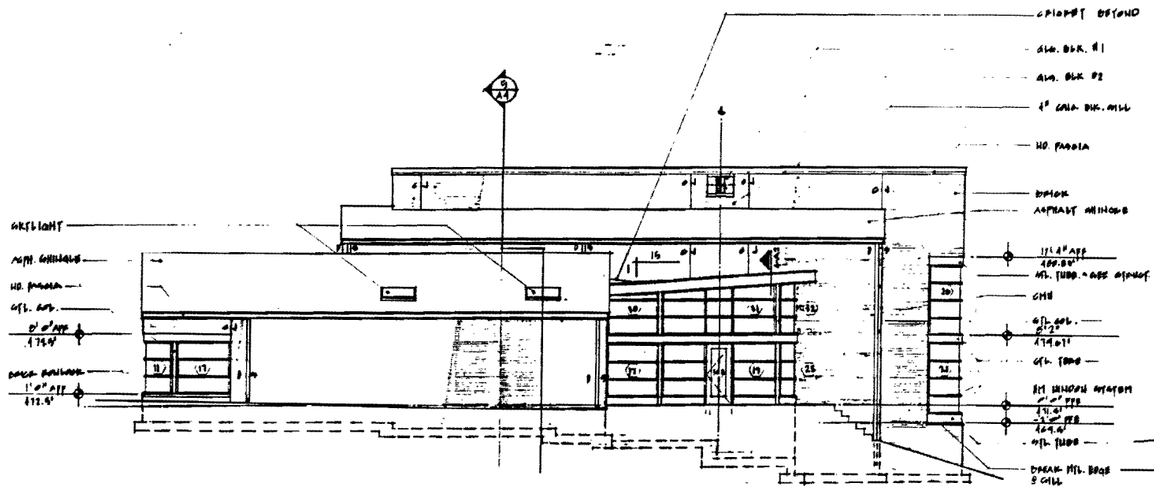
6/LG
DETAIL DESCRIPTION
SCALE: NTS

7/LG
DETAIL DESCRIPTION
SCALE: NTS

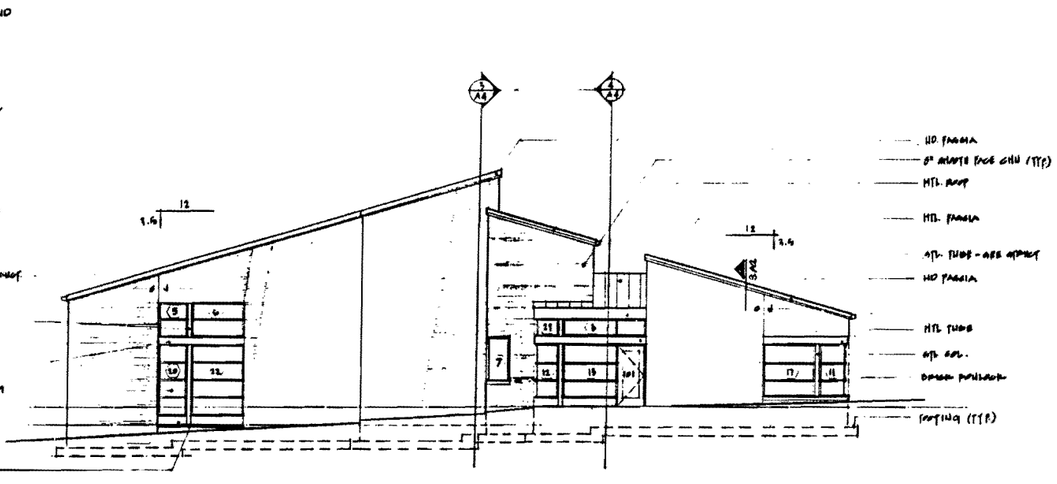

BESSIE ALSTON ESTATE
D.B.129-352
B1-G
USE 3.100
P.B. 70-102
B1-G
USE 2.110
D.B. 903-388
B1-G
USE 1.110
JOSEPHINE A. JONES
D.B. 85-326
B1-G
VACANT
DANIEL
D.B. 72
JUNK CARS TO BE REMOVED BY ADJACENT LAND OWNER
RAY ALLEN BUTLER
D.B. 205-202
D.B 244-1072
B1-G
USE 11.000
NOTE: EXISTING WELL AND SEPTIC TANK TO BE FILLED AND ADANDONED AS DIRECTED BY THE ORANGE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
RELOCATE OVERHEAD SERVICE TO ATWATER HOUSE AS SHOWN ON UTILITY PLAN WITHOUT INTERRUPTING POWER
DEMOLISH WALL
DEMOLISH HOUSE
EXISTING ONE STORY HOUSE
DEMOLISH AND FILL WELL WITH SOIL
EXISTING WELL
DEMOLISH METAL OUTBUILDING
CHAIN LINK FENCE TO REMAIN
REMOVE CHAIN LINK FENCE
15' ADDITIONAL R/W DEDICATION
OVERHEAD POWERLINES
EXISTING BIKE PATH
SOUTHERN RAILROAD
TOWN OF CARRBORO
R-2
VACANT
SOUTHERN EQUIPMENT CO.
R-2
VACANT
UNC
B1-G
VACANT
ROSENBACHER, WEAVER
B1-G
USE 4.100
EXISTING COMMERCIAL BUILDING
HEDGE
LEGEND

D.O.TISE Architects

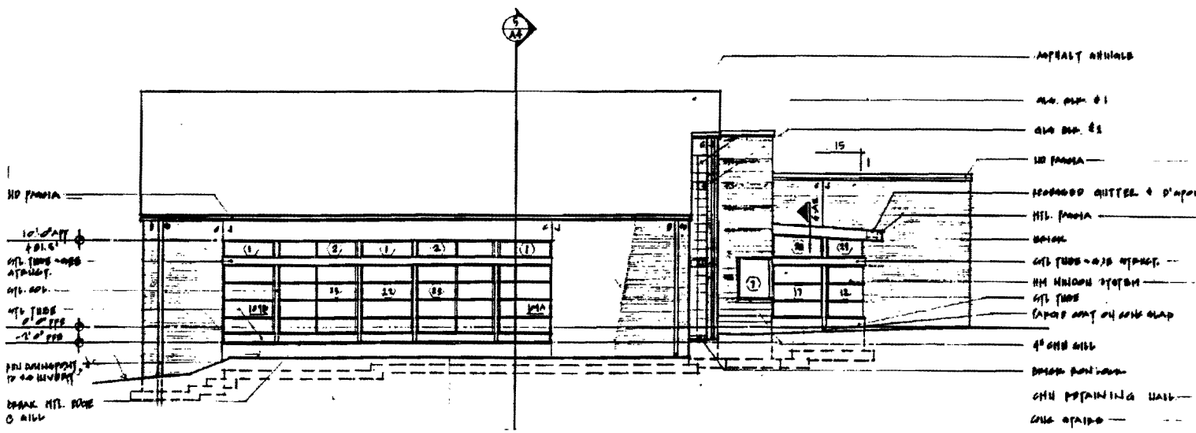
P.O.Box 3296
Chapel Hill, NC 27811-3296
919.967.0158



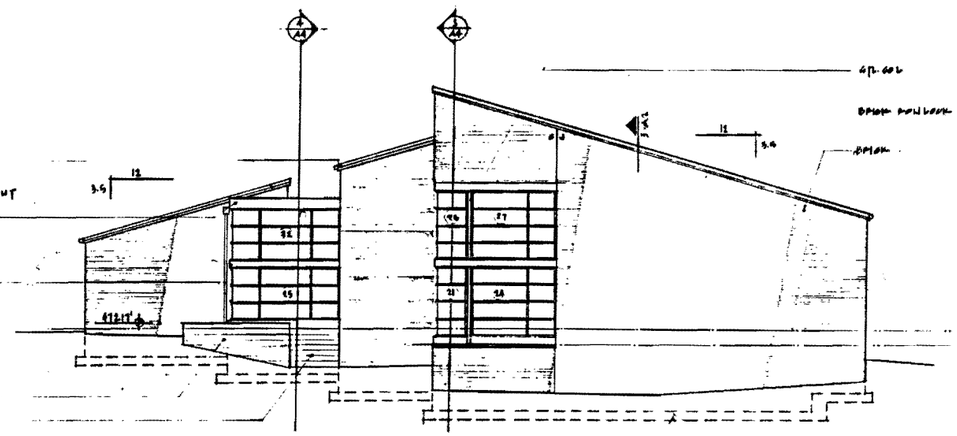
4
East Elevation
Scale: 1/8" = 1'-0"



2
South Elevation
Scale: 1/8" = 1'-0"



3
West Elevation
Scale: 1/8" = 1'-0"



1
North Elevation
Scale: 1/8" = 1'-0"

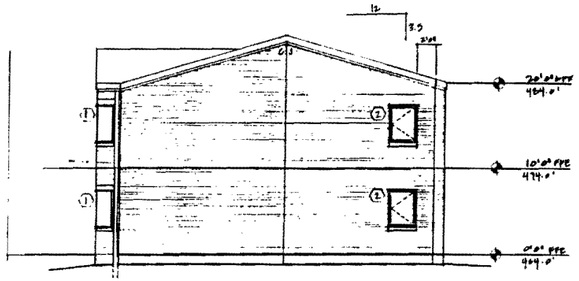
BREWER LANE

Studio

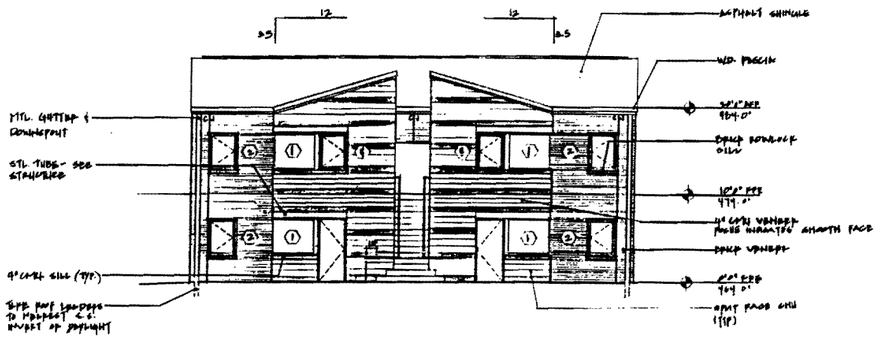
PHASE ONE

Date: 7.19.94
Job: 9403
Rev:

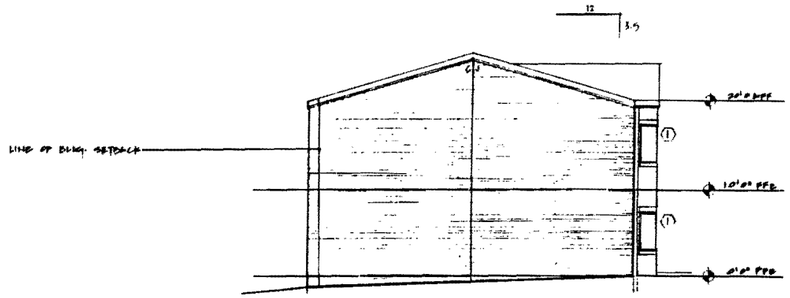
Sheet
A-3
3 of 6



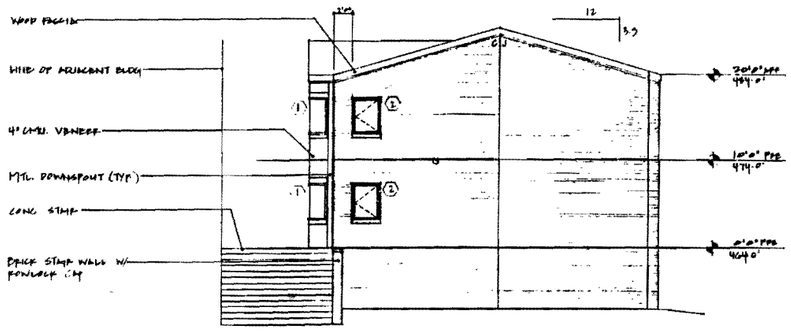
3 Elevation - Bldg. # 2
Scale: 1/8" = 1'-0"



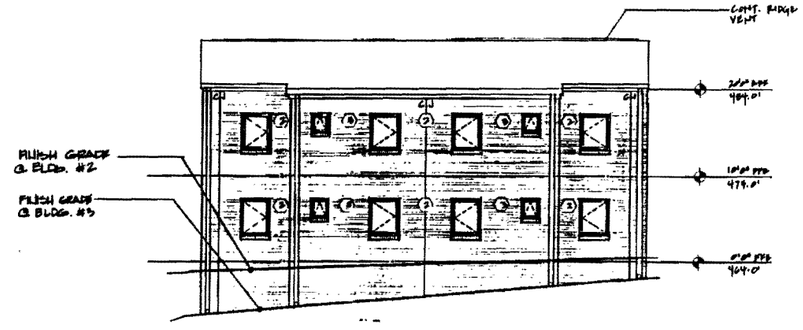
1 Elevation - Bldg. # 2 & # 3
Scale: 1/8" = 1'-0"



4 Elevation - Bldg. # 2
Scale: 1/8" = 1'-0"



5 Elevation - Bldg. # 3
Scale: 1/8" = 1'-0"



2 Elevation - Bldg. # 2 & # 3
Scale: 1/8" = 1'-0"

D.O.TISE Architects

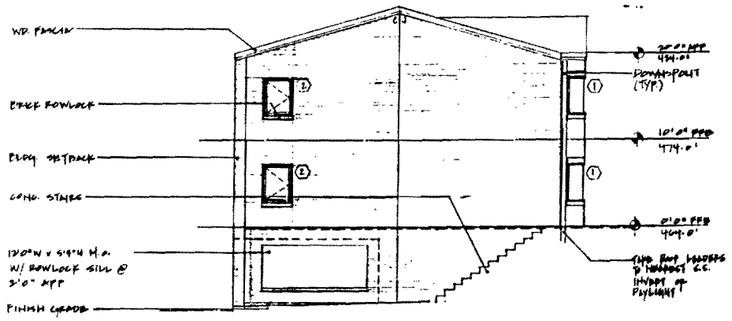
P.O.Box 3296
Chapel Hill, NC 27511-3296
919.967.0158

BREWER LANE APARTMENTS PHASE TWO

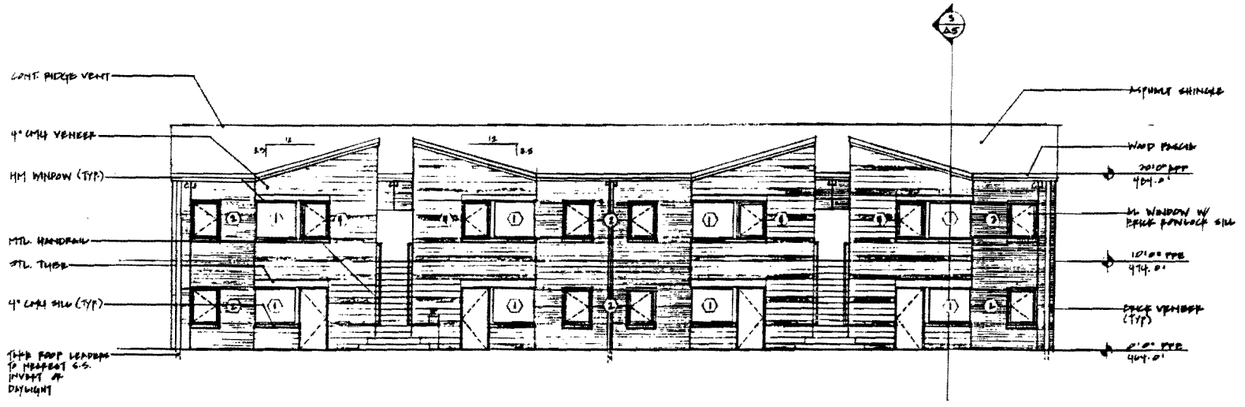
- Date: 7.19.94
- Job: 9404
- Rev:

Sheet

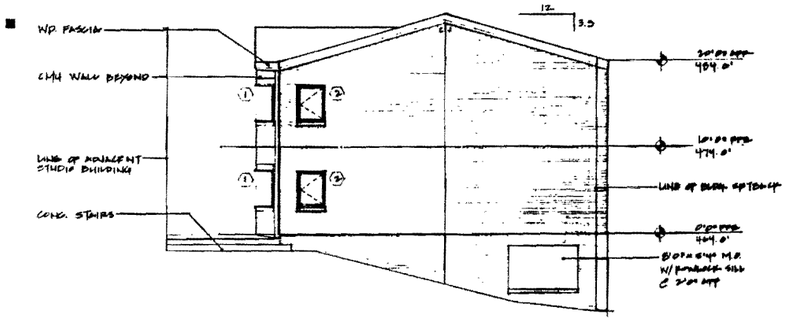
A-3



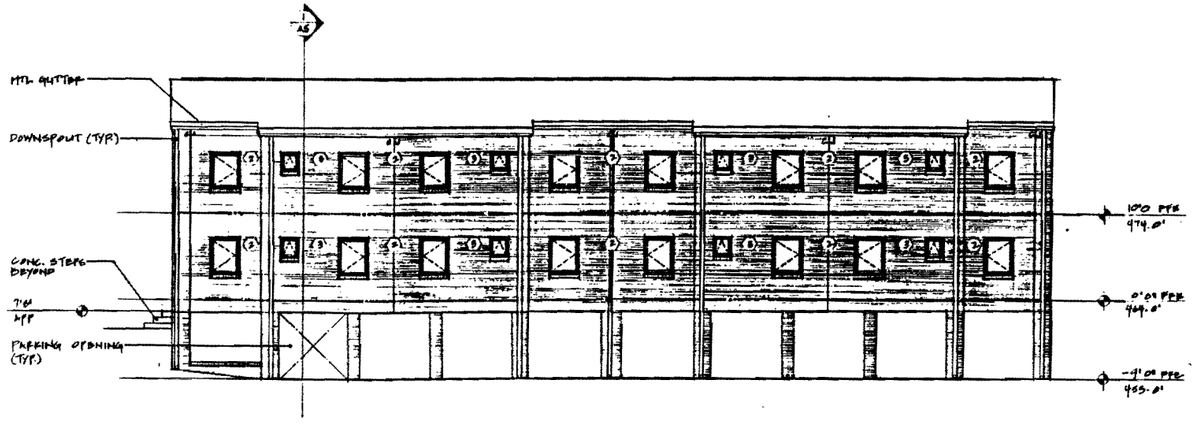
3
West Elevation - Bldg. #4
Scale: 1/8" = 1' - 0"



1
South Elevation - Bldg. #4
Scale: 1/8" = 1' - 0"



4
East Elevation - Bldg. #3
Scale: 1/8" = 1' - 0"



2
North Elevation - Bldg. #3
Scale: 1/8" = 1' - 0"

D.O.TISE Architects

P.O.Box 3296
Chapel Hill, NC 27511-3296
919.967.0158

BREWER LANE APARTMENTS PHASE TWO

Date: 7.19.94
Job: 9404
Rev:

Sheet
A-4
4 of 6

CONDITIONAL OR SPECIAL USE PERMIT WORKSHEET

I. COMPLETENESS OF APPLICATION

R.M. ☑ The application is complete.

JB ☐ The application is incomplete: _____

Agent

II. COMPLIANCE WITH THE ORDINANCE REQUIREMENTS

R.M. ☑ The application complies with all applicable requirements of the Land Use Ordinance.

JB ☐ The application is not in compliance with all applicable requirements of the Land Use Ordinance for the following reasons: _____

Agent

III. CONSIDERATION OF PROPOSED CONDITIONS

If the application is granted, the permit shall be issued subject to the following conditions:

1. The applicant shall complete the development strictly in accordance with the plans submitted to and approved by this Board, a copy of which is filed in the Carrboro Town Hall. Any deviations from or changes in these plans must be submitted to the Zoning Administrator in writing and specific written approval obtained as provided in Section 15-64 of the Land Use Ordinance.

2. If any of the conditions affixed hereto or any part thereof shall be held invalid or void, then this permit shall be void and of no effect.

IV. GRANTING THE APPLICATION

R.M. ☐ The application is granted, subject to the conditions agreed upon under Section III of this worksheet.

Agent

V. DENYING THE APPLICATION

☐ The application is denied because it is incomplete for the reasons set forth above in Section I.

☐ The application is denied because it fails to comply with the Ordinance requirements set forth above in Section II.

☐ The application is denied because, if completed as proposed, the development more probably than not:

1. Will materially endanger the public health or safety for the following reasons:

_____

_____

_____

2. Will substantially injure the value of adjoining or abutting property for the following reasons:

_____

_____

_____

3. Will not be in harmony with the area in which it is to be located for the following reasons:

_____

_____

_____

4. Will not be in general conformity with the Land Use Plan, Thoroughfare Plan, or other plans officially adopted by the Board of Aldermen for the following reasons:

_____

_____

_____

BOARD OF ALDERMEN

ITEM NO. D(2)

AGENDA ITEM ABSTRACT

MEETING DATE: September 20, 1994

SUBJECT: CONTINUATION -- Public Hearing: Voluntary Annexation of Property Located at 400 Smith Level Road

DEPARTMENT: PLANNING DEPARTMENT	**PUBLIC HEARING:** YES _X__ NO ____
ATTACHMENTS:	**FOR INFORMATION CONTACT:** Roy Williford, 968-7713

THE FOLLOWING INFORMATION IS PROVIDED:

(X) Purpose	(X) Summary	(X) Analysis
(X) Recommendation	(X) Action Requested	

PURPOSE

The North Carolina Federation of Business and Professional Women's Club, Inc. submitted a Petition for Annexation of Contiguous Property on June 10, 1994. The petition requests that the area located at 400 Smith Level Road be annexed to the Town of Carrboro, North Carolina. The total acreage located on this property equals 1.02 acres with out any dwelling units.

This public hearing was continued on August 09, 1994 until September 20, 1994. However, the applicant has been unable to complete their subdivision process to date. This process should be completed upon sewer connection approval by OWASA. To allow this sewer connection process to be completed, the administration is requesting that this public hearing be continued until October 25, 1994.

SUMMARY

- The Town received a petition from the North Carolina Federation of Business and Professional Women's Club, Inc. requesting Carrboro to annex the property located at 400 Smith Level Road .
- The town clerk has certified the sufficiency of the petition.
- On June 28, 1994, the Board of Aldermen set a public hearing to be held on August 9, 1994.
- The Board of Aldermen is requested to hold a public hearing and at the conclusion adopt the attached ordinance.
- At the request of the applicant, the Board continued the public hearing to September 20, 1994.

ANALYSIS

This matter was scheduled for the Board's August 09, 1994 meeting but Town staff received a letter from the agent of the Business and Professional Women's Association requesting a postponement of the petitioned annexation. To date, the applicant has been unable to complete their subdivision process which involves sewer connection approval by OWASA. Due to this process being incomplete, another postponement is requested.

RECOMMENDATION

The Administration recommends that this public hearing be continued until October 25, 1994.

ACTION REQUESTED

The Board of Aldermen is requested to continue this public hearing until October 25, 1994.

BOARD OF ALDERMEN

ITEM NO. E(1)

AGENDA ITEM ABSTRACT

MEETING DATE: September 20, 1994

SUBJECT: Request from Winsome Lane Homeowners Association

DEPARTMENT: Administration	**PUBLIC HEARING: YES ____ NO _x__**
ATTACHMENTS: Memo from Winsome Lane Homeowners Association	**FOR INFORMATION CONTACT: Robert Morgan, 968-7706**

PURPOSE

To receive a request from the Winsome Lane Homeowners Association to amend the Land Use Ordinance relating to the impervious surface requirements in the watershed.

ACTION REQUESTED

To refer the request from the Winsome Lane Homeowners Association to the town staff to consider in conjunction with the request received from Carrboro Baptist Church to amend the impervious surface requirements in the watershed.

MEMORANDUM

To: Mayor and Board of Aldermen
From: Winsome Lane Homeowners Association
Subject: Impervious Surface Limitations
Date: September 15, 1994

We understand Winsome Lane Subdivision was one of the first areas to develop under Carrboro's watershed ordinance. Seven houses have been completed to date and three are under construction. All of the property owners in Winsome Lane were aware of the impervious surface limitations before purchasing their lots; however, many of us have faced unanticipated problems meeting those requirements. The purpose of this memorandum is to inform you of those problems and to explore ways in which they might be addressed.

The watershed ordinance provides an impervious surface limitation of 4% on any lot of 5 acres or more. However, in new subdivisions, the 4% limitation is applied to the total acreage being developed so the actual impervious surface area available for allocation to individual lots in the subdivision is net of subdivision roads. As a result, the actual impervious surface available per lot is less than 4% even where, as is the case in Winsome Lane, all of the lots are 5 or more acres. In fact, the actual allowable impervious surface in Winsome Lane left after deducting the impervious surface used by the subdivision road represents 2.98% of the remaining land.

The ordinance permits the developer to allocate the available impervious surface area to the individual lots. It is our understanding that the developer of Winsome Lane attempted to take into account difficult lot shapes and topographical constraints in apportioning the permitted impervious surface. As shown in the attached Table 1, the allowable impervious allocated to the individual 5+ acre lots in Winsome Lane ranges from 1.79% to 4.31%. In terms of actual square footage, these percentages yield a lower allowable square footage for many Winsome Lane lots than the square footage permitted by the ordinance for 2 acre lots in subdivisions existing prior to the adoption of the ordinance. See Table 2.

In several cases the actual house location had to be shifted from that anticipated by the developer due to topographic problems or because the Orange County Health Department changed the required location of the septic field. Since, as demonstrated in Table 3, driveways account for a substantial percentage of the impervious surfaces for each lot, changes in the location of the houses resulting in the need for longer driveways than originally anticipated has caused owners real difficulty in meeting the impervious surface limitations while having reasonable use of their property.

In order to address this problem, we would like to suggest that the Board consider adopting the following:

1. Amend the ordinance to treat lots in new subdivisions the same as lots in subdivisions existing prior to the adoption of the ordinance such that a 5 acre lot in a new subdivision would

have the same 4% impervious surface limitation as does a 5 acre lot in a pre-existing subdivision;

2. Amend the ordinance to allow variances to be issued by the Board of Adjustment under circumstances where necessary driveway length requires that an inordinate amount of impervious surface be used for the driveway;

3. Amend the ordinance to permit the allocation of impervious surfaces at less than 100% for driveways where it can be demonstrated that the surface areas are porous or partially porous. The attached brochure describing a new type of paving system is illustrative of what we would encourage you to consider.

We thank you for your attention to this matter. Please feel free to contact Jerry Levit (office 493-6905, home 967-1772) or Liz Rooks (office 549-8181, home 942-3013) if you have any questions.

TABLE 1

Winsome Lane Subdivision Impervious Surface Limitations

Lot #	Acreage	Lot Area In Square Fee	Impervious Surface Permitted	Impervious Surface as Percentage of Lot Area
1 & 2	5.23AC	228,103SF	6,120SF	2.68%
3a	5.00AC	217,859SF	7,600SF	3.49%
3b	5.01AC	218,173SF	5,980SF	2.74%
4a	5.01AC	218,329SF	6,640SF	3.04%
4b	5.00AC	218,230SF	7,240SF	3.32%
5a	5.00AC	217,823SF	5,690SF	2.61%
5b	5.02AC	218,983SF	6,880SF	3.14%
6a	6.59AC	287,274SF	7,840SF	2.73%
6b	5.02AC	219,093SF	5,560SF	2.54%
7a	5.00AC	218,229SF	7,720SF	3.54%
7b	5.01AC	218,239SF	8,080SF	3.70%
8a	5.00AC	218,230SF	6,160SF	2.82%
8b	5.01AC	218,237SF	5,800SF	2.66%
9a	5.01AC	218,237SF	7,360SF	3.37%
9b	5.00AC	218,017SF	9,400SF	4.31%
10a	5.01AC	218,319SF	6,080SF	2.78%
10b	5.01AC	218,317SF	7,880SF	3.61%
11a	5.01AC	218,514SF	5,440SF	2.50%
11b	5.01AC	218,515SF	8,729SF	3.99%
12a	6.58AC	286,694SF	9,613SF	3.35%
12b	5.59AC	243,841SF	8,000SF	3.28%
13a	5.00AC	217,952SF	5,680SF	2.61%
13b	5.00AC	217,803SF	5,680SF	2.61%
14	6.10AC	265,585SF	5,440SF	2.05%
15	7.57AC	329,854SF	5,920SF	1.79%

TABLE 2

EXCERPT FROM CARRBORO ORDINANCE

IMPERVIOUS SURFACE CALCULATIONS

Art. XVI. FLOODWAYS, FLOODPLAINS, DRAINAGE, AND EROSION

LOT SIZE		IMPERVIOUS SURFACE	
ACRES	SQUARE FOOTAGE	SQUARE FOOTAGE	PERCENTAGE
0.5	21,780	4,200	19.28%
0.6	26,136	4,300	16.45%
0.7	30,492	4,400	14.43%
0.8	34,848	4,500	12.91%
0.9	39,204	4,600	11.73%
1	43,560	4,700	10.79%
1.1	47,916	4,800	10.02%
1.2	52,272	4,900	9.37%
1.3	56,628	5,000	8.83%
1.4	60,984	5,100	8.36%
1.5	65,340	5,200	7.96%
1.6	69,696	5,300	7.60%
1.7	74,052	5,400	7.29%
1.8	78,408	5,500	7.01%
1.9	82,764	5,600	6.77%
2	87,120	5,700	6.54%
2.1	91,476	5,800	6.34%
2.2	95,832	5,900	6.16%
2.3	100,188	6,000	5.99%
2.4	104,544	6,100	5.83%
2.5	108,900	6,200	5.69%
2.6	113,256	6,300	5.56%
2.7	117,612	6,400	5.44%
2.8	121,968	6,500	5.33%
2.9	126,324	6,600	5.22%
3	130,680	6,700	5.13%
3.1	135,036	6,800	5.04%
3.2	139,392	6,900	4.95%
3.3	143,748	7,000	4.87%
3.4	148,104	7,100	4.79%
3.5	152,460	7,200	4.72%
3.6	156,816	7,300	4.66%
3.7	161,172	7,400	4.59%
3.8	165,528	7,500	4.53%
3.9	169,884	7,600	4.47%
4	174,240	7,700	4.42%
4.1	178,596	7,800	4.37%
4.2	182,952	7,900	4.32%
4.3	187,308	8,000	4.27%
4.4	191,664	8,100	4.23%
4.5	196,020	8,200	4.18%
4.6	200,376	8,300	4.14%
4.7	204,732	8,400	4.10%
4.8	209,088	8,500	4.07%
4.9	213,444	8,600	4.03%
5	217,800	8,712	4.00%

TABLE 3

Winsome Lane Driveway Calculations

Lot	Driveway Square Footage	% of Permitted Impervious Surface
3A	3,580	47.0%
4B	4,975	68.7%
7A & B[1]	9,560[2]	60.5%
8A[3]	2,460	39.9%
9A	5,050	53.7%
10A	2,768	45.5%
10B	1,780	22.6%
11A[4]	2,325	42.7%
11B	5,298	60.6%
13A	3,590	63.2%
13B & 14[5]	6,000	53.9%

[1] Under construction.

[2] Includes walks.

[3] Under construction.

[4] Under construction.

[5] Proposed.

Grassrings Porous Paving System

The Right Choice For A Better Environment

Grassrings reinforce turf so that fire trucks and cars can drive and park on grass.

As we keep stretching the limits of our physical environment and continue to demand greater quality from our built environment, the demand for porous paving, and specifically grass paving, is rapidly increasing. Historical solutions using impervious asphalt or concrete paving for all paving surface applications is no longer acceptable. Better choices for the environment are required. New and exciting solutions are available.

Innovation in design and materials, as found in the Grassrings porous paving system, provides effective functional and environmental alternatives for numerous paving applications. Especially where the specific attributes of asphalt and concrete are not required.

Porous paving offers many environmental and project advantages over impervious pavements:

Multiple-Use Surfaces
- grass firelane/park land
- green space/access drive
- lawn/parking area
- park/maintenance access

Higher Visual Quality
- park appearance
- 100% grass coverage
- no concrete squares showing

Immediate Percolation
- on-site control of storm water
- local recharge of water table
- reduced size and cost of required drainage system

Cooler Environment
- low heat retention
- low light/heat reflectivity
- preserve existing trees/support new plantings

The Leader of Porous Paving Industry

Rings, Inc., headquartered in Denver, Colorado, is the world manufacturer of Grassrings and has been in business since 1982. A name change from Ritterings to Rings, Inc. was made in August '90.

We maintain the philosophy that the quality and environmental soundness of porous paving is directly linked to understanding the major components that comprise any paving system (especially grass paving systems) - a. the structural, load-bearing base; b. the grass surface; and c. the rings that support and transfer the loading through the grass surface to the base course.

Each of these components have their own characteristics and requirements, and must be designed in response to those characteristics, and the needs of any particular application.

Rings, Inc. was the first grass paving designer and manufacturer to respond to the unique needs and requirements of a complete grass paving system, not just a porous paving product.

Rings, Inc. continuously responds to the needs of the marketplace by incorporating improvements, developing design information, and maintaining a professional staff to answer technical questions and solve project-specific design issues.

Another step Rings, Inc.has taken to protect the environment is to manufacture our rings using a majority of recycled plastic. Grassrings2 (100% plastic) can also be reclaimed and recycled again.

Grassrings -- Innovations and Advantages

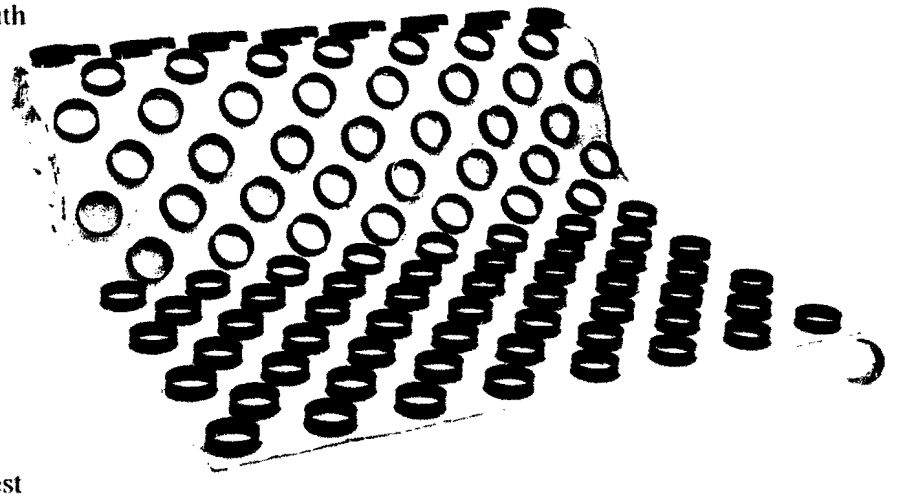
Grassrings has undergone constant modification and improvement, responding to new applications and more demanding criteria. In doing so, Grassrings has established and maintains a technological lead on all competitive products.

Unique features of the product and system include:

- The only grass paving with 100% grass coverage.
- The only grass paving with a 92% root zone potential (three times greater than with concrete grass pavers).
- The only grass paving with flexibility to respond to surface undulations required by design, or caused by settlement or frost.
- The first grass paving to require a porous sandy gravel road base for structural support and to accommodate the extended grass root zone.
- The grass paving that is by far the easiest and fastest to install.
- The grass paving with the lowest installed cost.

Additional features and advantages of Grassrings include:

- Heavy vehicles (such as a 70,000 lb. fire truck) can be driven and parked on a Grassrings installation without compacting soil, damaging the rings, or causing any measurable deformation of the paving system. Grassrings2 has been laboratory tested to support direct loading in excess of 5000 psi (351 kg/sq cm).
- The Grassrings system provides for maximum percolation of rainfall and irrigation, and minimizes the amount of runoff experienced, thereby reducing the required drainage system size and cost.
- No heat is absorbed by the Grassrings system eliminating heat stress on turf commonly found with concrete pavers.
- Grassrings is installed totally below the surface of the turf, and therefore has no sharp or hard edges exposed above the surface that could be dangerous.
- Mowing and other maintenance is the same as for normal turf areas. Even snow can be plowed with regular removal equipment.



The Original Grassrings Mat.
One roll measures 4' x 20' x 1" and weighs less than 25 lbs. Supports 750 psi, and installs at rate of 2000 sf/hr.

Grassrings -- Two Versions

Grassrings is manufactured in two distinct formats - the original 4' by 20' mat and the new 20" by 20" (0.5m x 0.5m) molded unit.

The mat is rolled for shipment and delivery to the job site, making it extremely easy for the installer to carry and install 80 square feet of Grassrings at a time. The mat weighs approximately 25 pounds (0.31 lbs/sq ft).

The molded units are shipped to the job site assembled into four-unit squares (40" by 40", 1 meter x 1 meter), or as individual units, depending on project requirements. Each four-unit square (square meter) weighs approximately four pounds, or 0.37psf (2 kg/sqm).

Grassrings -- Applications and Uses

Grassrings no longer is just for grass. While the majority of our applications are and will continue to be grass paving, Grassrings2 also provides the same benefits to gravel porous paving applications.

Grassrings no longer is just for vehicles. Due to the design and flexibility of Grassrings2, its benefits are also being realized in pedestrian and sports field/park applications.

Some of the most common and best suited applications for Grassrings and Grassrings2 include:

- Firelanes
- Church parking
- Employee parking
- Overflow and event parking
- Guest parking
- Residential driveways
- Utility access/service drives
- Street parking/shoulder area
- Highway shoulders
- Emergency turnarounds
- Golf cart paths
- Pedestrian pathways/trails
- Slope/channel stabilization

Design Considerations -- Grassrings Paving System

Grass Paving

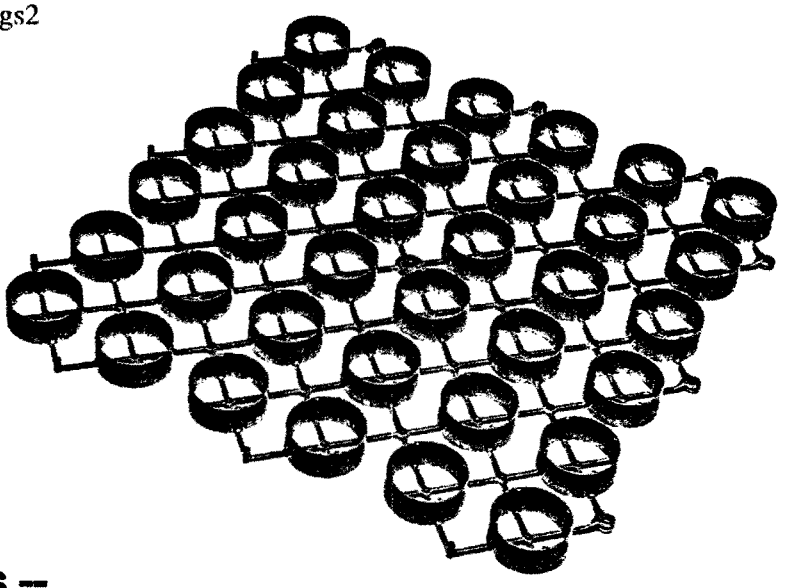
Grassrings grass paving system is similar to hard surface paving systems. The paving system is made up of two components -- the wearing course and the base course. The wearing course (grass and sand filled rings) is structurally supported by the base course. Since our system is basically the same as traditional paving, the same design steps and considerations must be used.

Base Course

Project requirements for traffic loads (whether vehicular or pedestrian) will determine the load bearing requirements of the base course. Since the load bearing capacity of the existing subbase soils also influences the design of the base, a registered civil or geotechnical engineer should be consulted.

The base course also performs as the extended root zone for the grass. Compaction of the base course must be restricted to between 90% to 95% Modified Proctor to ensure adequate water percolation and air infiltration to supply the root system.

Chemical and cement stabilizer additives to the base course must be avoided, as they may affect the pH and porosity of the grass root zone.



New Grassrings^2 Unit.
20" x 20" x 1" (0.5m x 0.5m x 25mm) square, all injection molded. Can support 5000 psi, and be installed at 1200 sf/hr.

Wearing Course

The Grassrings unit and the grass are the wearing course of the porous paving system. Grassrings can support loads in excess of 5000 psi (exceeding the capability of standard asphalt and concrete paving). It, therefore, is capable of supporting heavy vehicles and other concentrated loads.

Grassrings transfers the loading from vehicles and pedestrian traffic to the base course, protecting the upper root zone from compaction; and extends the strength of the base course up to the surface, supporting vehicles or other loads applied to the area.

Grass, as a living plant, is the most fragile element within this paving system. While Grassrings protects roots from the compacting forces of vehicles and pedestrians, grass blades can only withstand a limited amount of traffic (passes). The wear resistance grasses have depends on the combination of many factors, including:

- Species used
- Amount of sun the grass receives
- Overall climatic conditions
- Amount of water/irrigation
- Level of maintenance provided

While grass paving is not suitable for high traffic situations, its use and success can be enhanced on low traffic projects through careful planning and appropriate design.

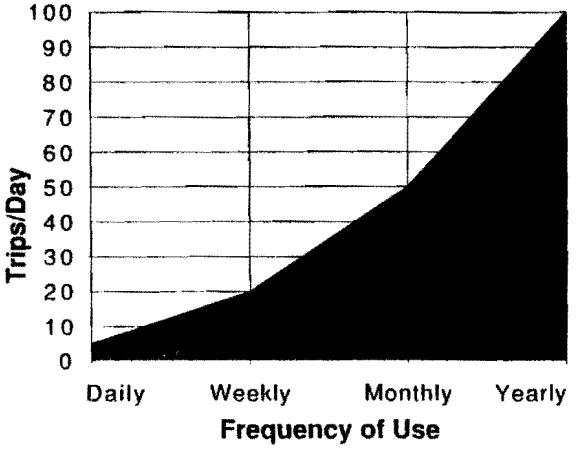
Traffic Frequency and Volume

Both the frequency of traffic events (daily, once a week, once a month, or two or three times a year) and the volume of traffic at each event (number of vehicles passing over an area in a set period of time - typically a day) are important in determining the appropriateness of grass paving in a traffic situation.

As a general rule of thumb, the higher the frequency of traffic events, the lower the volume must be to maintain the integrity and quality of the grass. Put another way, the higher the volume of traffic during an event, the more time between traffic events there must be for the grass to recover.

In situations where high traffic volumes are combined with high frequency of use, grass paving will most probably perform unsatisfactorily, and will not provide the visual and aesthetic character desired.

The following graph illustrates the relationship between volume of traffic and frequency of use.



The information in the graph is theoretical since insufficient research data is available to make any warranty or specify exact volumes of traffic for different species of grass. The information is, however, based on several observations of various conditions and usage.

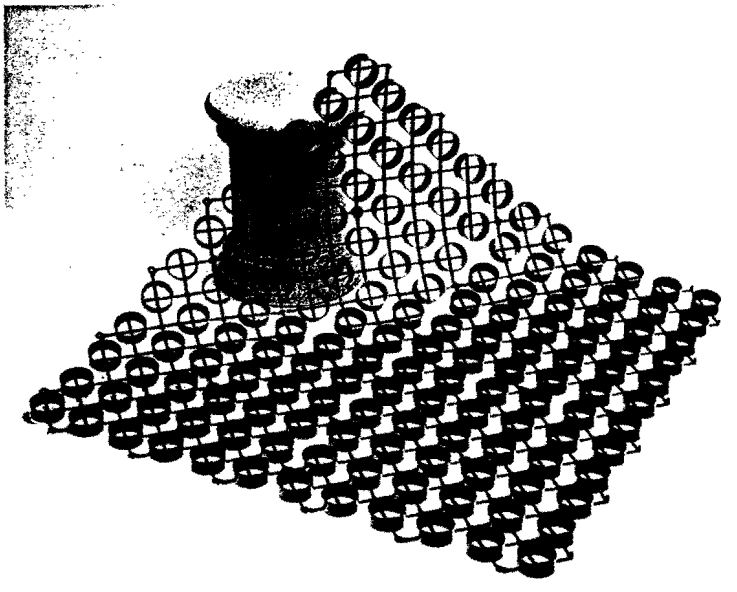
Examples of applications that are within limits of grass paving include firelanes, and:

Church Parking - moderate volumes of traffic with two or three services, but is only used once a week. The grass would have a chance to grow and recover between occurrences.

Employee Parking - low volume of traffic (one to three passes per day), but the frequency is daily (except for weekends). Only the parking stall area should be paved in grass. The aisles would be hard surface paving or gravel.

Event/Holiday Overflow Parking - high volumes of traffic, but only used once a month or less frequently. The grass may sustain significant damage during the event, but would have ample time between usage to maintain a quality appearance.

Pedestrian Traffic - high volumes in random directions as found in parks and campuses. Concentrated traffic ("cowpaths")may require an alternative surface like gravel to withstand high wear and tear on grass.



Flexibility of standard 40"x40" Grassrings² Square.

Flexibility/Versatility

Not all areas in need of compaction protection and stabilization are flat and straight. With the flexibility and ease of shaping and cutting both versions of Grassrings, swales, berms and other rolling terrain can be easily constructed and maintained.

By combining porous paving (grass and gravel) with hard surface materials such as stone, brick and concrete, exciting designs can be created.

Selection of Grass

Grass species differ widely in their capacity to perform in a paving application.

The most important criteria is hardiness - responsive to local growing conditions. Second is wearability - to withstand wear and tear of traffic and respond with rapid growth and repair. Third is maintenance requirements - including fertilization needs, water demands, and mowing height and frequency needed.

Low frequency applications (such as firelanes) can use a wide and fleshy (high water content) bladed grass, or bunch type native grass, because wear and tear will be low. Parking areas will require a thinner and drier bladed grass with a dense rizome type root structure. Grasses must also be selected for shade tolerance responsive to site specific conditions.

Maintenance

As traffic use of the grass paved area increases, maintenance observation and response will increase accordingly. A firelane will require the same care as normal lawn areas, while parking areas may require care similar to athletic fields. Over the life cycle of a grass paved area, however, the maintenance requirements should still be less than an asphalt paved surface.

Mow, irrigate and fertilize as needed for other healthy, high quality turf. Once a year add micronutrients with regular fertilizers to keep the turf healthy.

Snow Removal

Snow removal is easily accomplished with standard small truck snowplows, with skids attached to keep the blade one inch above the surface. Snow blowers and power brooms can also be used effectively on smaller areas.

Should small areas be damaged by plow blades, then simple reseeding and topdressing with sharp sand is all that is necessary.

Irrigation

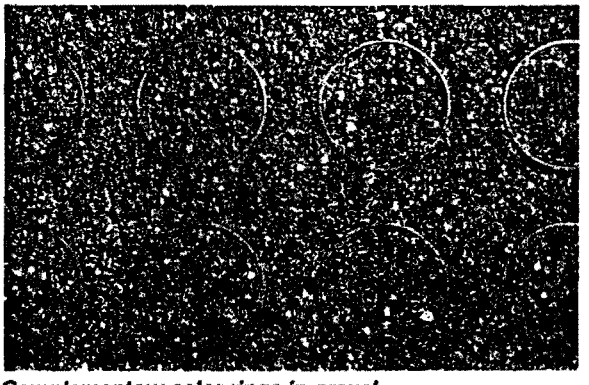
The past ten years have shown us that regardless of "historical" rainfall data, there is no area of the country immune to the possibility of long periods of drought.

We strongly recommend that grass parking areas be provided with an irrigation system - whether manual with hoses, a simple "coarse coverage" semi-automatic system, or a totally automated "fine coverage" system, to protect the paving investment.

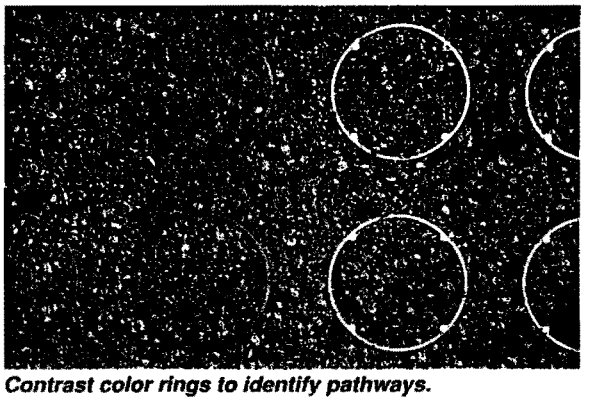
If an irrigation system is not provided and a drought occurs, grass coverage can be restored by reseeding the area, but may have to be done in phases so as to minimize disruption of traffic activity.

Gravel Paving

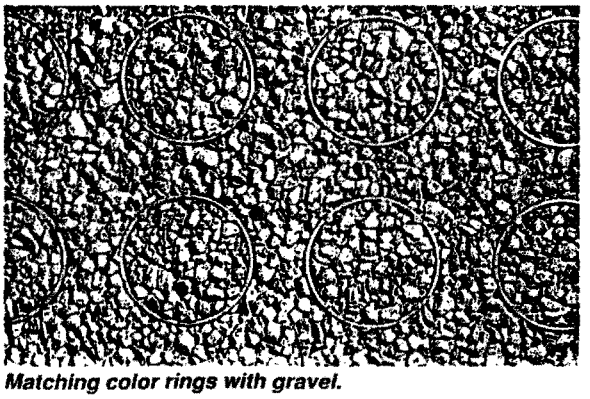
Gravel paths, trails, access drives and parking areas can also be surfaced in gravel with Grassrings2, when traffic volume and frequency are too great for grass surfacing, or when the appearance and texture of gravel is desired.



Complementary color rings in gravel.



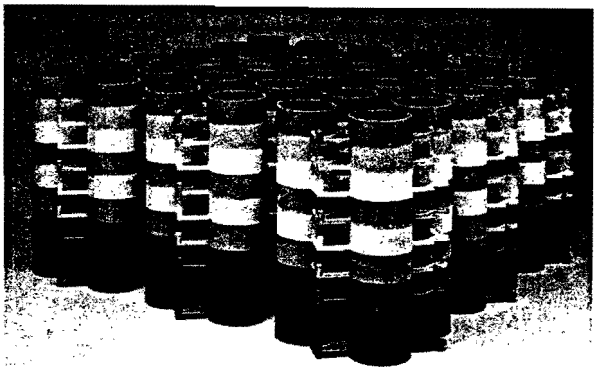
Contrast color rings to identify pathways.



Matching color rings with gravel.

Grassrings2 will stabilize the gravel fill material (size 0.25" minus) and reduce lateral migration which causes ruts, thereby providing long life, and requiring less repair and maintenance than normal gravel surfaces.

As with standard pavement design, the sub-base and base course must be designed to meet necessary loads. For longevity, a sandy gravel base must be adequate to provide a very rigid base for the wearing course.



Custom colors are available to allow the Grassrings2 unit to complement or contrast in color with the gravel fill material. More expensive "decorative" gravel can be used in the rings above the base course because the finish thickness is kept to only one inch.

Grading & Slopes

Grass paving should be designed to reduce the potential for slippage when the grass is wet. Long slopes in excess of 5% should consider use of gravel or concrete traction bars. Vertical curves should allow adequate clearance for long wheel-based vehicles with long overhangs. Check with local fire authorities for their clearance requirements.

Surface grading should be directed to take advantage of storm water runoff from hard surface areas for supplemental irrigation and storm detention/infiltration. In sandy soils, Grassrings can accommodate up to a 6" rainfall over 24 hours before generating runoff.

Both versions of Grassrings can be used for slope stabilization and erosion control on steep slopes or slopes subject to occasional flooding and rapid flow. Contact our headquarters for more information and design assistance.

Additional Information

Our Grassrings Design and Maintenance Manuals contain additional information and details on the design, care and renovation of grass and gravel paved areas. Call our toll free number for free copies.

Other Products

Manufactured by Rings, Inc.:

Drainrings - subsurface composite drainage system featuring excellent strength, high volume flow capacity, horizontal or vertical flow channels. The short or long term storage capabilities provide for detention with infiltration, or retention for possible reuse of stormwater (irrigation, fire protection, livestock water, etc.).

Beachrings - portable mats to provide access for people in wheelchairs or using walkers across loose sand. Mats are made in two sizes and sold to individuals as well as public recreation agencies to provide for total population access to public recreation facilities.

Pillowdrain - sub-surface drainage product, composed of a filter fabric envelope filled with "plastic foam gravel". The lightweight and reusability features provide many benefits to roof gardens and interior planters to reduce structural and handling costs.

Products Distributed by Rings, Inc.:

Hydrogrow - plastic polymer material used as a soil amendment to retain moisture in the soil for use by roots of plant material.

Tensar Geogrids® -"geotextile" to strengthen and keep the roadbase in place. Use of this product reduces the depth of required base material, prevents migration of base into subsoils, and minimizes material and excavation costs.

® The Tensar Corporation

Our products are protected by US Patent Numbers: 4,067,197, 4,896,993, 4,986,699, with other patents pending.

Product Specification

Grassrings - (original mat version)
Made of 3" dia. x 1" high rigid rings, injection molded with HDPE or similar recycled plastic material, spaced 6 rings per square foot in staggered rows, bonded to polyester knitted fabric with non-biodegradable thermoset plastic adhesive, and backed by a single layer of recycled paper; as manufactured by: Rings, Inc., 7700 Cherry Creek South Drive, Unit 6, Denver, Colorado, USA 80231, phone (toll free USA and Canada) 1-800-428-1333, International 303-696-1510, and fax (303)696-9757.

Grassrings^2 - (injection molded version)
Made of recycled HDPE or equivalent rigid plastic, with integral grid and rings in a square spacing pattern, with rings 2.25" (60 mm) dia. x 1" (25mm) high, spaced 13 per square foot (144/sq m), with integral post and eye alignment and interlock system, exhibiting flexibility such as to be folded to 90 degree angle without breaking; as manufactured by: Rings, Inc., 7700 Cherry Creek South Drive, Unit 6, Denver, Colorado, USA 80231, phone (toll free USA and Canada) 1-800-428-1333, International 303-696-1510, and fax (303)696-9757.

Alternates

Alternative products may be accepted, but must be reviewed prior to bidding, with bids submitted in addition to the product described above, and identified as an alternate selection.

Design specifications

A complete design and installation specification with guidelines for base course, product, and grass installation, in CSI style format, is available upon request from our Headquarters in Denver. Call our toll free number, or fax your request.

Call for your nearest Distributor or Sales Representative toll free - 800-428-1333 from anywhere in the 50 states or Canada.

International Headquarters:

Rings, Inc.

7700 Cherry Creek South Drive, Unit 6
Denver, Colorado 80231
Toll Free USA & Canada • 800-428-1333
Overseas • Country Code + 303-696-1510
FAX 303-696-9757

Grassrings Grass Paving System

Hydrogrow Crystals (Shown Expanded and Dry)

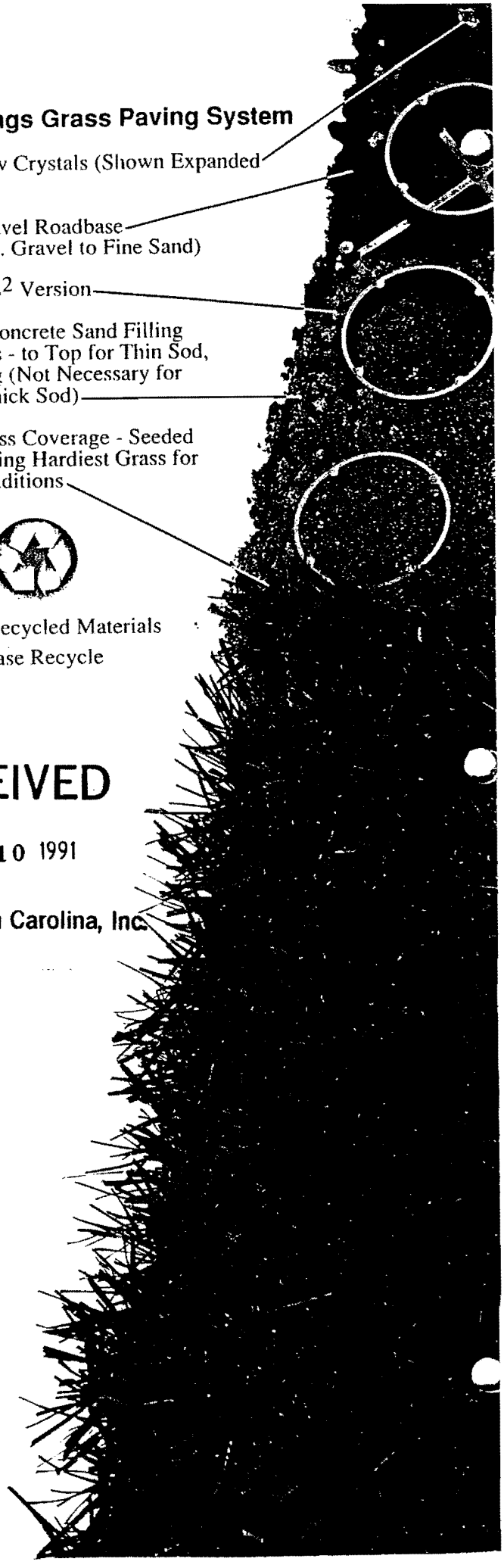
Sandy Gravel Roadbase (0.75" Dia. Gravel to Fine Sand)

Grassrings^2 Version

Washed Concrete Sand Filling Grassrings - to Top for Thin Sod, or Seeding (Not Necessary for 1"-1.5" Thick Sod)

100% Grass Coverage - Seeded or Sod Using Hardiest Grass for Local Conditions

We Use Recycled Materials
Please Recycle



BOARD OF ALDERMEN

ITEM NO. E(2)

AGENDA ITEM ABSTRACT

MEETING DATE: September 20, 1994

SUBJECT:Origin-Distribution of UNC Traffic

DEPARTMENT: **PLANNING DEPARTMENT**	PUBLIC HEARING: **YES** ____ **NO** ____
ATTACHMENTS: **Draft of UNC Transportation Demand Management Plan**	FOR INFORMATION CONTACT: **Kenneth Withrow, 968-7713**
THE FOLLOWING INFORMATION IS PROVIDED:	
(x) Background	**(x) Action Requested**
( ) Alternatives	**(x) Recommendation**
	(x) Analysis

PURPOSE

The following item was presented by the Board of Aldermen during their Annual Planning Retreat; with an inquiry as to the volume of traffic destined for UNC traveled through Carrboro and what route is utilized the most. There are currently plans being prepared by the UNC Department of Transportation to conduct a university wide study under the proposed "Transportation Demand Management Plan".

SUMMARY

- Discussions with the UNC Department of Transportation planning staff have occurred concerning the origin-distribution of UNC traffic between the Town of Carrboro and UNC-Chapel Hill.

- The UNC Department of Transportation is creating a Transportation Demand Management Plan. This plan will have a study component that will determine existing modal splits of transportation patterns used by employees and students.

- The current plan is in draft form, and will be completed by December, 1994. Participation in this plan by Carrboro, Chapel Hill, and Orange County will be welcomed.

ANALYSIS

Discussions have occurred with the UNC Transportation Planner and the Carrboro planning staff, concerning the origin-distribution of UNC traffic between the Town of Carrboro and UNC-Chapel Hill. The Carrboro planning staff was informed that the UNC Department of Transportation is currently creating a Transportation Demand Management Plan. A university wide study will be conducted under this plan to determine the existing modal splits of transportation patterns used by employees and students. The planner also indicated that the current Transportation Demand Management Plan is in draft form; and the final draft will be completed by December, 1994. The final draft of the plan will be reviewed by the UNC administration for comment and revision before being implemented by the UNC Department of

Transportation. The UNC Department of Transportation had indicated that participation from the Towns of Carrboro, Chapel Hill, and Orange County will be welcomed.

RECOMMENDATION

The staff recommends that the Board of Aldermen permit the planning staff to coordinate efforts with the UNC Department of Transportation in the creation and implementation of the Transportation Demand Management Plan.

ACTION REQUESTED

To carry out recommendation as discussed above.

DRAFT

University of North Carolina
Transportation Demand Management Plan

Purpose

The purpose of a Transportation Demand Management (TDM) Plan is:

1. To provide an overall strategy that can be implemented on the University of North Carolina (UNC) campus which will reduce the amount of automobile traffic, especially the Single Occupancy Vehicle (SOV).
2. To demonstrate the different means by which alternative transportation methods can be utilized to achieve this goal.
3. To set realistic and flexible goals and objectives by which to measure the progress of the TDM plan.
4. To provide a mechanism to assure the on going and continued use of TDM strategies.

Background

The University of North Carolina has actually been practicing TDM strategies for many years even before the term TDM was developed. These TDM practices were developed and used out of necessity and common sense.

The main UNC campus is approximately two square miles large with a student body of 24,000 and an employee base of about 14.000. Having 38,000 people coming and going to a two square mile area on a daily basis logically requires that some TDM strategies be implemented. Therefore, the TDM methods such as carpooling, bicycle riding, walking, and using public transit have evolved as the main methods for TDM. Other forms have also evolved such as the campus Point to Point shuttle, and flex time work hours and work days.

Goals, Objectives, Policies and Programs

The essential first step in a Transportation Management Plan is to establish a set of goals and objectives. Along with these goals and objectives are a set of policies, programs and tasks to describe the specific actions taken to further the goals and objectives. Ideally, these policies and programs should be of the type which can be measurable or quantifiable to determine the progress of the plans goals and objectives. However, like any measurable goals of a plan, they should be realistic and achievable and not act as restrictions to further growth and development. Also, the TDM plan, like all plans, must be flexible and be updated at least annually to take into account changing conditions and circumstances.

Implementation

Implementation of the TDM Plan will be undertaken on a University wide basis as well as a within each major division or department of the University and hospital. Within each

major division or department, an appointed individual will be responsible for and coordinate the setting of TDM numerical goals with the University Transportation Planning Office.

A university wide study will be undertaken to determine the existing modal splits of transportation patterns used by the employees and students. From these figures, percentages of employees targeted for additional alternative forms of transportation will be set and reviewed on a periodic basis to measure progress (See Appendix).

DRAFT

GOAL

MAINTAIN THE QUALITY OF LIFE ON THE UNC CAMPUS AND IN THE CHAPEL HILL COMMUNITY BY MITIGATING THE ADVERSE IMPACTS OF GROWTH INDUCED AUTOMOBILE TRAFFIC.

OBJECTIVE

1.0 REDUCE THE NUMBER OF SINGLE OCCUPANCY VEHICLE (SOV'S) TRIPS TO AND FROM THE UNC CAMPUS BY ACTIVELY ENCOURAGING AND IMPLEMENTING ALTERNATIVE MEANS OF TRANSPORTATION THROUGH TRANSPORTATION DEMAND MANAGEMENT (TDM) TECHNIQUES.

POLICY 1.1 SUPPORT AND ENCOURAGE THE USE OF THE CHAPEL HILL TRANSIT SYSTEM AS AN ALTERNATIVE TO THE SOV.

Program 1.1.1

Continue to subsidize the operating expenses of the transit system in order to offer an economically competitive alternative to the SOV (make the price of bus transportation as cheap or cheaper than driving).

Task 1.1.1.1

Sell bus passes and bus coupons at reduced rates for terms of one year or two school semesters.

Program 1.1.2

Market the Transit system to all University Departments, especially the hospital and health affairs area to make employees and students aware of the quality and convenience of using the transit system.

Task 1.1.2.1

Publicize the transit system in campus publications such as the student Daily Tar Heel, the employee UNC Gazette, and the Department of Transportation and Parking's (DTP) Word on the Street.

Task 1.1.2.3

Make the sales and availability of bus passes convenient by offering them at student stores, downtown locations, and at various locations on campus during registration.

Task 1.1.2.4

Make a detailed presentation about the transit system to all new employees at their orientation program and for all new students at the Campus Testing and Orientation Program (CTOPS).

Task 1.1.2.5

Assist the Transit System in determining the feasibility and need of new routes and schedules in order to serve as many employees and students as possible.

Program 1.1.3

Provide amenities at the bus stops to make the transit system convenient and safe for the users.

Task 1.1.3.1 Provide bus shelters at needed locations.
Task 1.1.3.2 Provide benches at needed locations.
Task 1.1.3.3 Provide trash receptacles.
Task 1.1.3.4 Provide adequate lighting.
Task 1.1.3.5 Provide adequate bus schedule and route information at each stop.
Task 1.1.3.6 Encourage new building designs to include convenient bus stops and bus stop pull off areas if possible.

Program 1.1.4

Provide that new buildings and facilities on campus will be accessible to the transit system by either assigning new routes or modifying existing routes.
Also create a transit/parking ratio that will serve as an indicator on how to increase transit.

POLICY 1.2 **ENCOURAGE THE USE OF THE BICYCLE AS AN ALTERNATIVE TO THE SOV.**

Program 1.2.1

Establish and provide bicycle routes through campus which access the bicycle routes of the Town of Chapel Hill and the main destinations on the UNC campus.

Task 1.2.1.1 Monitor the campus annually to determine the major destinations by means of bicycle parking patterns and by visual observations.
Task 1.2.1.2 Take bicycle count surveys at the major access points to campus.

Task 1.2.1.3 Provide separate or designated bikeways on campus where necessary to avoid bicycle-pedestrian conflict (widen existing sidewalks where they operate and designate for exclusive bicycle use).

Program 1.2.3

Provide adequate bicycle parking facilities on campus as near to the desired destinations as possible and under sheltered locations where appropriate.

Task 1.2.2.1 Provide the adopted standard campus bicycle parking rack on campus locations for easy identification and cost effectiveness in use.

Task 1.2.2.2 Provide sheltered bicycle parking locations where possible or utilize existing building overhangs where appropriate.

Task 1.2.2.3 Require new building construction plans to include bicycle parking racks near the anticipated destinations of the building or facility.

Program 1.2.3

Increase bicycle registration on campus for enhanced security and theft prevention.

Task 1.2.3.1 Continue free bicycle registration for students and employees.

Task 1.2.3.2 Market registration advantages for students at CTOPs orientation and for employees at New Employee orientation.

Task 1.2.3.3 Provide convenient opportunities, locations and incentives to register bicycles on the UNC campus.

Program 1.2.4

Encourage bicycle safety on campus.

Task 1.2.4.1 Encourage but not require the use of bicycle safety helmets for everyone over the age of 15.

Task 1.2.4.2 Provide and distribute bicycle safety brochures to include bicycle riding, operation and maintenance.

Task 1.2.4.3 Enforce traffic rules of the road for bicycles including the use of required equipment (lights) and use of turn signals.

POLICY 1.3 ENCOURAGE AND PROVIDE INCENTIVES FOR THE USE OF MULTI PASSENGER MODES OF TRANSPORTATION.

Program 1.3.1

Market the Campus Area Ride sharing Program (UNC CAR).

Task 1.3.1.1 Provide information and brochures to new and existing employees and students.

Task 1.3.1.2 Maintain a computer match list for riders wanting or needing shared rides to and from campus.

Task 1.3.1.3 Encourage private carpools.

Task 1.3.1.4 Encourage the practice of "kiss and ride" vehicle trips (dropping off/picking up other passengers of the same household in the same vehicle.

Program 1.3.2

Encourage the use and improve the service of the Campus Point to Point (P2P) shuttle system to decrease SOV trip generation on campus.

Task 1.3.2.1 Improve the telephone calling system to reach the P2P

Task 1.3.2.2 Design a fixed route shuttle to augment the system and decrease the peak calls during the PM hours for students

Task 1.3.2.4 Discourage the use of State vehicles for on campus errands

POLICY 1.4 DISCOURAGE STUDENTS FROM BRINGING CARS TO CAMPUS.

Program 1.4.1

Prohibit freshman and sophomore students from purchasing parking permits.

Task 1.4.1.1 Expand the policy through the Transportation and Parking Advisory Board (TPAC) to include the sophomore student class.

Program 1.4.2

Limit the availability of student parking areas on campus except for commuting students.

Task 1.4.1.2 Increase the parking fees for parking permits available to students.

OBJECTIVE

2.0 PROVIDE PARKING AREAS TO ADEQUATELY SERVE THE PRESENT AND FUTURE NEED OF THE CAMPUS AND NOT DISCOURAGE ALTERNATIVE FORMS OF TRANSPORTATION.

POLICY 2.1 **PROVIDE AND ENCOURAGE THE USE OF PARK AND RIDE FACILITIES OFF CAMPUS.**

Program 2.1.1

Market the use of the existing Park and Ride lots on Estes Drive, Airport Road, Plantation Plaza, and Highway 54 (Friday Center).

Task 2.1.1.1 Provide brochures to students and employees indicating the location and bus schedules to the parking lots from campus.

Task 2.1.1.2 Encourage and coordinate with the Town of Chapel Hill the provision of additional Park and Ride Lots at each major traffic artery leading to the campus (15-501 South, 15-501 East and I-40/Airport Road).

POLICY 2.2 **PROVIDE CLOSE IN PARKING FOR VISITORS AND PATIENTS OF THE HOSPITAL AND HEALTH AFFAIRS CLINICS.**

Program 2.2.1

Construct and maintain multi-level parking decks immediately adjacent to the hospitals and clinics to maximize the convenience patients seeking treatment and visitors attending the facilities.

POLICY 2.3 **PROVIDE PARKING FACILITIES AT SATELLITE CAMPUS LOCATIONS.**

Program 2.3.1

Construct surface parking facilities adjacent to off campus satellite facilities where space permits and according to the need of the facility considering the availability of transit service and other TDM techniques.

POLICY 2.4 **MAINTAIN THE PRESENT INVENTORY OF PARKING SPACES ON CAMPUS.**

Program 2.4.1

Repair, maintain, and improve the existing parking lots on campus.

Task 2.4.1.1 Make annual surveys and inspections of parking lots for damage, wear and tear.

Task 2.4.1.2 Prioritize repair and maintenance list according to budgetary restrictions.

Program 2.4.2

Replace on campus parking spaces lost to new construction of buildings and facilities.

DRAFT

OBJECTIVE

3.0 DESIGN UNC'S LAND USE AND DEVELOPMENT PLAN TO MINIMIZE THE NUMBER OF SOV TRIPS GENERATED TO AND FROM THE CAMPUS.

POLICY 3.1 **PLAN HIGH TRAFFIC GENERATING FACILITIES ON, ADJACENT OR NEAR THE MAIN CAMPUS TO REDUCE SOV TRIPS.**

Program 3.1.1

Encourage the location of child care centers at or near the campus or Park and Ride lots serving the University.

Program 3.1.2

Provide postal service letter boxes in drive by locations with driver side extended drop slots.

Program 3.1.3

~~Locate~~ Consolidate high traffic generating University functions on the main campus to reduce traffic and number of errands (Purchasing, Payroll, Transportation and Parking etc).

POLICY 3.2 **LOCATE NEW UNIVERSITY FACILITIES ON SATELLITE LOCATIONS OFF THE MAIN CAMPUS TO DISPERSE SOV TRIP GENERATIONS AND CONCENTRATIONS.**

Program 3.2.1

Encourage the construction of independently operated University facilities ~~on the fringe of the main campus or~~ at satellite locations off campus (Horace Williams property, Mason farm Property).

→ Disperse SOV Trip Generations as much as possible away from the main campus.

POLICY 3.3 **ENCOURAGE UNIVERSITY WORK OPERATIONS WHICH WILL REDUCE PEAK HOUR SOV TRAFFIC.**

Program 3.3.1

Encourage staggered work hours and "flex time" for hospital and University employees to avoid peak hour traffic congestion.

Program 3.3.2

Encourage "flex days" for employee work weeks to reduce daily traffic congestion.

Program 3.3.3

Encourage "at home" work or class periods where possible and appropriate (e.g. via computer or television) to eliminate some on campus traffic.

BOARD OF ALDERMEN

ITEM NO. E(3)

AGENDA ITEM ABSTRACT

MEETING DATE: September 20, 1994

SUBJECT: Carrboro Park and Ride Lot - Status Report

DEPARTMENT: **PLANNING DEPARTMENT**	PUBLIC HEARING: **YES** ____ **NO** ____
ATTACHMENTS: **Preliminary site plan**	FOR INFORMATION CONTACT: **Kenneth Withrow, 968-7713**
THE FOLLOWING INFORMATION IS PROVIDED:	
(x) Background	**(x) Action Requested** **(x) Analysis**
( ) Alternatives	**(x) Recommendation**

PURPOSE

The Carrboro Board of Aldermen, at their September 28, 1993 meeting, authorized the planning staff to contact the owners of Carrboro Plaza to try and obtain a long-term lease. The following information is an update to the Board as to the current status of a future lease agreement with the owners.

SUMMARY

- The Board of Aldermen, at their September 28, 1993 meeting, requested that the planning staff contact the owners of Carrboro Plaza to try and obtain a long-term lease.
- The most recent discussions concerning the status of the Carrboro Park and Ride Lot have occurred between Mr. Greg Shepard, Ms. Kimberly Marmaras, and Carrboro planning staff during the months of August and September, 1994.
- Prior to Carrboro Plazas' change of management groups from J.M. Kane and Company to Property Resources, Incorporated, a proposed site plan revised the current park and ride facility.
- The proposed site plan included restaurant, which would utilize forty-six spaces; and a park and ride lot, which would utilize seventy-eight spaces.
- The 1992 Chapel Hill-Carrboro Park and Ride survey conducted by NCDOT revealed that sixty percent of the Carrboro Park and Ride Lot is utilized during the weekday.
- Ms. Kimberly Marmaras had indicated that no discussions have been conducted concerning the Carrboro Park and Ride Lot; but indicated that the Town will be involved when discussions are held.

ANALYSIS

The Town staff initially informed the Board of Aldermen of the Carrboro Park and Ride Lots' status as of May 11, 1993. The staff indicated to the Board that as of March 25, 1996, Carrboro's current lease with the Carrboro Plaza for the park and ride facility will expire. A brief presentation was given by the staff that included a list of available sites for a park and ride lot if the lease could not be renewed. The Board of Aldermen requested additional information concerning the cost of leasing or purchasing one the sites available, as well as the Town's investment in the existing site, the impact on Carrboro Plaza if the park and ride lot were relocated, and other factors involving traffic impacts and expected tax loss to the Town if a site were purchased. The Town staff presented their findings at the September 28, 1993 Board Meeting; and the Board of Aldermen requested that the planning staff contact the owners of the property to try and obtain a long-term lease. The staff had met with officials of J.M. Kane and Company during the fall of 1993 to discuss the current lease along with future developments at the site. No formal lease renewal agreements were forthcoming at that time. The staff continued to contact members of J.M. Kane and Company during the winter of 1993-1994. No agreements between the Town of Carrboro and members of J.M. Kane and Company were forthcoming at that time also.

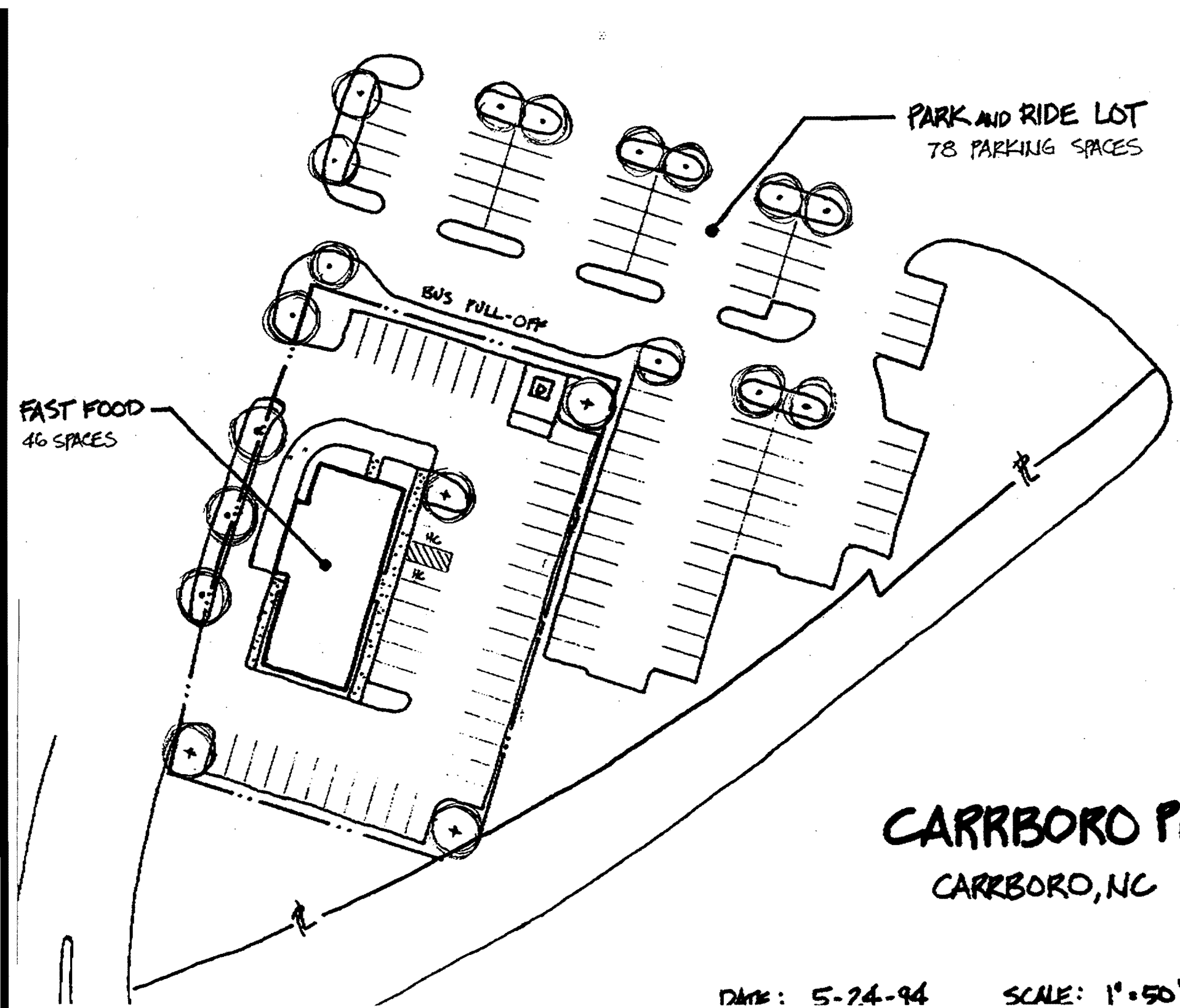
The most recent discussions concerning the status of the Carrboro Park and Ride Lot lease have occurred between Mr. Greg Shepard of Philip Post and Associates, Ms. Kimberly Marmaras of Property Resources Incorporated, and Carrboro planning staff during the months of August and September, 1994. Mr. Greg Shepard had informed me that prior to the change in property management of Carrboro Plaza from J.M. Kane & Company to Property Resources, Incorporated, a draft site plan was created to revise the current park and ride facility. The site plan created for the outparcel had revised the use of the existing Carrboro Park and Ride Lot outparcel at Carrboro Plaza to include a "fast food" restaurant use along with the park and ride lot.

The existing park and ride lot would be reduced from one hundred twenty-four spaces to seventy eight spaces. The remaining forty-six spaces would belong to the proposed restaurant. The 1992 Chapel Hill-Carrboro Park and Ride Survey conducted by the North Carolina Department of Transportation revealed that sixty percent (seventy four spaces) of the Carrboro Park and Ride Lot is used during the weekday. The heaviest use of the park and ride lot occurs during weekend activities conducted on the UNC-Chapel Hill campus.

A recent inquiry had been made to Ms. Kimberly Marmaras of Property Resources, Incorporated in order discover if any discussions about the Carrboro Park and Ride Lot outparcel had been conducted, as well as the status of the proposed site plan for the outparcel. Ms. Marmaras indicated that no discussions have been conducted concerning the outparcel or the proposed site plan for the outparcel. Ms. Marmaras had also indicated that the Town of Carrboro will be informed, and involved in any future discussions concerning the park and ride lot.

RECOMMENDATION

The Town staff recommends that the Board of Aldermen direct staff to continue to inquire Property Resources, Incorporated as to the status of the park and ride lot; and to schedule a meeting with Property Resources in order to review future proposals and site plans. The Town administration also recommends that another progress report be brought to the Board of Aldermen in ninety (90) days.


PARK AND RIDE LOT
78 PARKING SPACES
BUS PULL-OFF
FAST FOOD
46 SPACES
HC
HC
CARRBORO PLAZA
CARRBORO, NC
DATE: 5-24-94
SCALE: 1"=50'-0"