



MONTGOMERY COUNTY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

April 9, 2010

MCPB
Item # 5
4/15/10

MEMORANDUM

TO: Montgomery County Planning Board

VIA: John A. Carter, Chief
Urban Design and Preservation Division

FROM: Margaret K. Rifkin, AICP RLA, Urban Designer/Planner Coordinator
Urban Design and Preservation Division

SUBJECT: Mandatory Referral No 10702-MCPS-1
Cannon Road Elementary School Modernization Project,
901 Cannon Road, Silver Spring near the Intersection of Randolph Road and New
Hampshire Avenue Zone: R-90 White Oak Master Plan.

STAFF RECOMMENDATION: **APPROVAL** to transmit to Montgomery County Public Schools, the following comments:

1. Obtain a Park Construction Permit from the Construction Unit of the Park Development Division before construction on park property.
2. Perform all facility improvements on park property consistent with the Department of Parks Construction guidelines, details, and specifications subject to Parks Department approval.
3. The ball fields must be ready to re-open April 1, 2012.
4. Provide permanent park maintenance access both during and after construction.
5. Any Mandatory Referral submission for future improvements at the school must include a traffic study if those improvements will increase school's student core capacity beyond 640 students.
6. Provide one tree per 40 feet of perimeter around the parking lot.

PROJECT SUMMARY

Location

Cannon Road Elementary School is located in White Oak in the Northeast Consortium School Cluster. It is south of Randolph Road. To the east is Cannon Road Local Park which is owned by the Maryland-National Capital Park and Planning Commission. The existing school is on a 4.4 acre property owned by MCPS which is next to the park playing fields owned by the M-NCPPC. The school is bordered on the south and west by single family detached homes, on the north by Cannon Road and faces single family detached homes across the street as well as the entrance to Clifton Road.

Project Description

This project consists of the complete demolition of the existing school building and its replacement. The new building is scheduled to open in January 2012. The parent drop-off area as well as existing play areas, will be relocated.

The replacement school will be designed for an initial capacity of 519 students with a master planned (core) capacity for 640 students. The existing school is 44,839 square feet and the new school will be 83,377 square feet.

ANALYSIS

Conformance with the White Oak Master Plan (1997)

The project is consistent with the master plan. One of the goals of the master plan is to “strengthen the link between community facilities and the area residents.” (p.63). This proposal achieves this with an improved path from Cannon Road across the park and with a southern pedestrian path from the neighborhood.

Conformance with Development Standards of the R-90 Zone

The school site is in the R-90 zone. The following table compares the development standards to the application based on a combined park/school site.

Development Standard	Required /Allowed	Proposed
BUILDING		
Front Setback from Street	30'	75'
Rear Setback	25'	70'
Side	8'	75'
Sum of Sides	25'	127'
Maximum Building Height	35'	35'
Lot Size	9,000 sf min	4.4 acres + 26.8 acres 31.2 acres
Building Coverage of Lot	30%	3.9% 53,222 SF=1.22 acres
PARKING		
Parking Lot Setback from Front Lot Line	30'	10'
Parking Lot Setback from Residential Use	30'	30'
Parking Spaces	(66 existing)	73

The parking lot setback from Cannon Road does not conform with the zone, however, due to the small size of the school site, and the fact that this is reuse of an existing site, this is acceptable.

Building Location

The proposed building represents a significant improvement over existing conditions for the school by providing better circulation and more space for students. The new building will be L-shaped and conform to the shape of the school property.

Transportation Analysis

Pedestrian Circulation- The sidewalks along Cannon Road will be maintained and will link public bus stops along Cannon Road with the school.

Parking and Circulation-The on-site traffic circulation will be reconfigured to provide separate loops for student drop off and buses. The service driveway will be extended from the bus loop and approximately 93 parking spaces will be provided within the student drop off and service driveway areas.

Transportation Capacity – A traffic study was required. The analysis shows that Critical Lane Volumes will be below the applicable congestion standards for the area. The project therefore satisfies the Local Area Transportation Review requirements of the Adequate Public Facilities F test.

The PAMR mitigation goal for this project is 50 percent. MCPS is only partially achieving it, and that is primarily through bussing of students to the school. In order to achieve the goal MCPS should explore opportunities to increase the number of students walking or taking the bus.

Landscape

The landscape plan includes a variety of native trees with white pines along the edge shared with neighboring residents that provide a buffer. There are some shade trees at the edges of the parking lot. Their number should be increased to one per 40 feet of parking lot perimeter. There are approximately 60 trees around the school site and along the path leading to the front of the building. The landscape plan also includes bioorientation planting and red twig dogwood and Diablo ninebark shrubs.

Leadership in Energy and Environmental Design (LEED) Statement

The modernization is designed to achieve LEED Silver Certification. The site will have a new stormwater management system that will include a green roof. The green roof will decrease the project's impervious area by 1.22 acres. The project includes the construction of geothermal wells that will help to reduce the operating costs of the school.

Parkland

This is a park-school site where most of the play fields and all the new geothermal wells for the school will be on parkland. MCPS will be required to obtain a Park Construction Permit and to participate in a memorandum of understanding with the M-NCPPC concerning reconstruction of the softball field and soccer field as well as on-going management and maintenance. An attached

memo from the Parks Department includes in detail the conditions that MCPS is expected to meet in order to receive a Park Construction Permit.

CONCLUSION

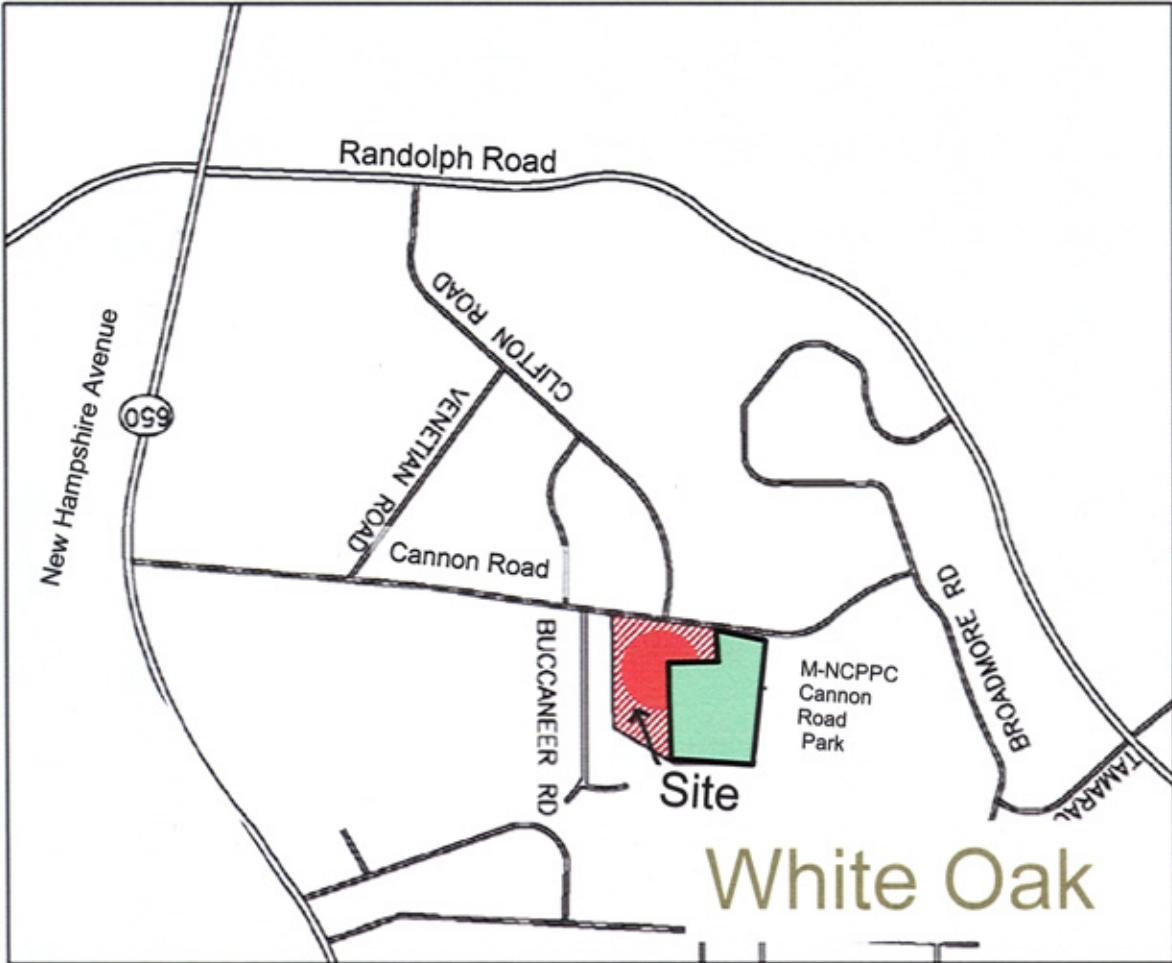
This modernization will significantly improve the school by replacing the building with a new one with additional program space, a green roof and geothermal power. The ability of the school to serve the community will be enhanced and the park will resume its role in the community when the geothermal wells are installed and reconstruction of the play fields is complete.

Attachments:

1. Vicinity Map
2. Existing Conditions
3. Existing and Proposed Layout Concept
4. Memo from Montgomery County Parks

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Attachment 1 – Vicinity Map



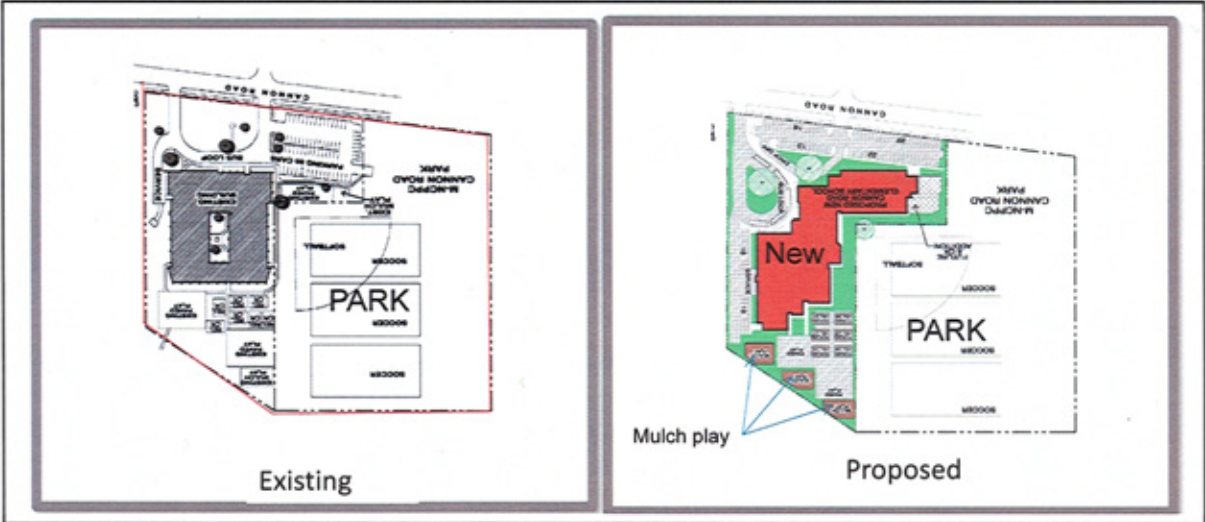
Attachment 2 – Existing Conditions



Presentation for Cannon Road Elementary School -Mandatory Referral March/April 2010



Attachment 3 - Existing and Proposed Layout Concept





MONTGOMERY COUNTY DEPARTMENT OF PARKS
THE MARYLAND - NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MEMORANDUM

April 8, 2010

TO: Margaret K. Rifkin, RLA AICP Urban Designer, Design Division
Department of Planning

VIA: Dr. John E. Hench, Chief, Park Planning and Stewardship (PPS) Division *J. Hench*
Montgomery County Department of Parks

FROM: Brooke Farquhar, Supervisor, Park and Trail Planning, PPS Division *Brooke Farquhar*
Montgomery County Department of Parks
Mark S. Wallis, Planner Coordinator, PPS Division *MSW*
Montgomery County Department of Parks

SUBJECT: Cannon Road Elementary Park/School Mandatory Referral – MR # 10702-MCPS-1

Introduction

The Cannon Road Elementary Park/School is scheduled to be demolished and rebuilt during the period between June 2010 and December 2011. As a Park/School, certain facilities such as parking and ballfields are shared between the two sites as illustrated in Attachment A. The sharing of the facilities requires the demolition and reconstruction of the school site must be coordinated with facilities and operations at the park.

A component of reconstructing the school site consists of geothermal well heating and cooling technology. The 120 wells will be drilled horizontally underground approximately 400 feet deep and will be located underneath Softball Field Number 1 at Cannon Road Local Parkas illustrated in Attachment B "MRSP-1" dated 12/04/2009. Although the technology is not new to Montgomery County Public School (MCPS) sites, it will be a first geothermal well field located on parkland. The invasiveness of installing the technology will require the entire park to be closed during the well drilling, installation, and field restoration period. Park closure is due to intense construction activity in a tight space and concerns about lack of adequate access for maintenance, public safety and policing.

Conditions of Approval

The following items should be added as Conditions of Approval for the above subject Mandatory Referral. These conditions will be restated and enforced during the Park Construction Permit approval process under the auspices of the Department of Parks, Park Development Division.

General Conditions

- Montgomery County Public Schools (MCPS) must obtain a Park Construction permit from the Department of Parks (Parks) for all construction activity on Parkland. Submittals to Parks will include all existing recreation facilities on parkland.

- Cannon Road Local Park will be closed from June 21, 2010 until construction, field restoration and facility replacement activities are determined to be complete enough to safely re-open the park to the general public. The school is expected to re-open December 2011 and the fields ready for permitted play by April 1, 2012.
- The following events will occur during the closure period:
 1. Demolition and construction of Cannon Road Elementary School,
 2. Geothermal Well construction underneath Softball Field Number 1,
 3. Restoration of Softball Field Number 1 and Soccer Field Number 1, and
 4. Backstop replacement of Softball Fields 1 and 2.
- Following construction and re-opening of the school, MCPS shall maintain the proposed play areas and basketball courts, which are partially located on parkland.

Geothermal Well Installation, Infiltration Trench, Retaining Wall, and Softball Field Number 1 Restoration

- Parks authorizes installation of approximately 120 geothermal heat pumps (vertical ground loop system) on Softball Field Number 1.
- Parks authorizes construction of an infiltration trench and retaining wall located adjacent and just east of the basketball courts.
- Parks will require that the Park Construction Permit issuance include an easement requirement that delineates the location, and outlines maintenance and replacement responsibilities of the geothermal wells, retaining wall and infiltration trench.
- Parks authorizes MCPS to utilize the existing athletic fields to stage construction materials and vehicles during the construction period. Staging area must be shown on the construction documents. Athletic fields are to be restored following construction.
- Staging area will be scheduled and located to minimize affected area and the amount of time the fields will be closed to allow maximum time for field restoration.
- MCPS will determine and specify whether the fields will be restored as seeded grass or sod.

Softball Field Number One and Two - Backstop Upgrades

- Backstops and home plates are to be replaced on both Softball Fields 1 and 2. The size and specification are to be approved by the Parks Ballfield Coordinator and Park Manager.
- Player protection fencing and benches are to be provided at both Softball Fields 1 and 2 per specifications approved by the Parks Ballfield Coordinator and Park Manager.
- The infield skin will be restored at Softball Field 1 and retained at Softball Field 2.

- On Softball Field Number 1 (per sheet LSP-1 -Attachment B), eliminate fencing beyond player bench area.
- Sufficient time must be provided for knitting in new turf and infield restoration before field is re-opened for permitted public use.

Soccer Field

- Eliminate all references to soccer goals. Parks will decide whether to supply goals, determine size, location and type of anchoring at future date.
- Soccer field must be restored per Park's specifications.
- Sufficient time must be provided for knitting in new turf before re-opening for public use.

Park Maintenance Access

- MCPS will provide a permanent and secured maintenance access to the Park from the school parking lot. MCPS will provide detailed design, signage and stripping plan for Parks approval. The entrance including stripping detail shall be shown on the Park Construction Permit plans.

Hard surface path from Cannon Road Elementary School east to Cannon Road

- MCPS and Parks will share removing the existing concrete surface path and steps that start at the school parking lot, east to Cannon Road and replace with new. Location and specs for new walkway to be developed by both agencies. MCPS will pay for the design and replacement of hard surface path starting from parking lot east to the first step. Parks will pay for the design and replacement of the concrete surface path from the first step to Cannon Road. The Park's portion of the sidewalk will be completed during the summer of 2012.

Trees Mitigation and Replanting Requirements

The following comments are in response to submittal labeled "LSP -1" Dated 12/4 2009 and referenced as Attachment C.

- Parks authorizes MCPS to remove one 42 inch Willow Oak Tree at the Northwest corner of Park property adjacent to the existing building and replace with inch for inch mitigation at agreed to locations within the Cannon Road Local Park property.
- Twelve 3.5 inch caliper trees should be planted onsite for mitigation.
- Trees proposed for mitigation planting should not be located along walkway to Cannon Road. This will ensure good site visibility consistent with Crime Prevention through Environmental design (CPTED) principles.
- Nine trees should be planted as shown behind northern softball field along 3rd base line and first base line.

- The remaining 3 trees should be planted along the eastern forest edge north of tennis courts.
- Between the building and Softball Field Number 1, change the two Armstrong Red Maples to Willow Oak, which will be more tolerant of difficult soil conditions.
- Plants must be installed per M-NCPPC Plant Installation Specifications and Details which include an inspection pre planting of plant materials by M-NCPPC Horticulturist
- Trees must include a one year warranty and be provided with aftercare during the growing season. Aftercare must include watering for 26 weeks during the growing season. Each tree shall receive 30 gallons of water per week (based on the 10 gallons per caliper inch formula).
- Upon one year warranty inspection, trees shall be de-staked and dead and unacceptable plant material replaced for acceptance.

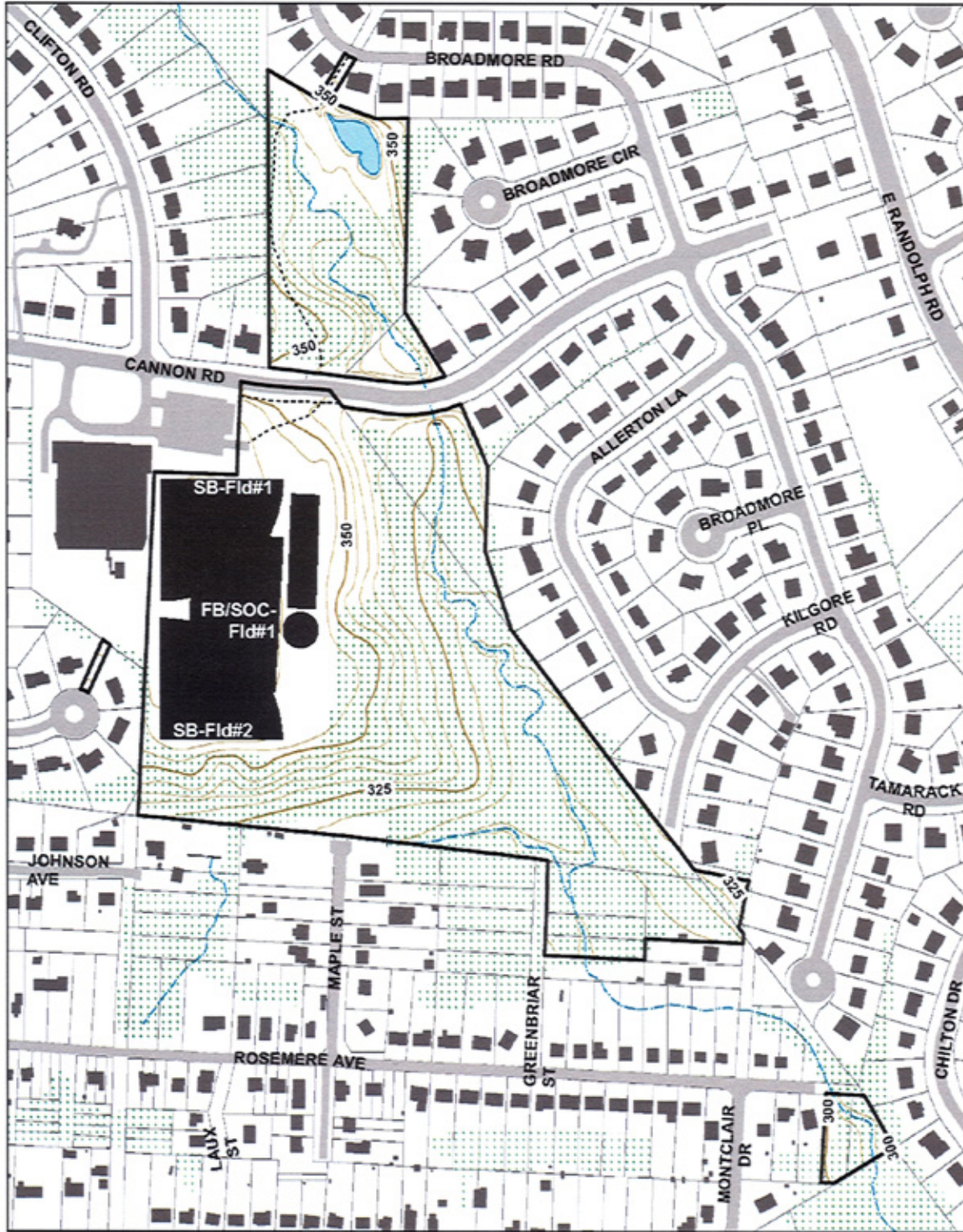
This concludes the Mandatory Referral review comments on this project.



- cc. Mary Bradford, Director of Parks
 Mike Riley, Deputy Director Administration Montgomery Parks
 Gene Giddens, Acting Deputy Director for Operations
 Brain Woodward, Chief, Southern Region Operations
 Al Astorga, Chief, Central Maintenance Division
 David Vismara, Chief, Horticultural Services
 Kate Stookey, Chief, Park Information and Customer Service
 Mitra Pedoeem, Chief, Park Development Division
 Michael Ma, Supervisor Construction Section, Park Development Division
 Darren Manley, Chief, Park Police
 David McGrady, Park Manager, Martin Luther King Region
 Eugene Rose, Horticultural Services

ATTACHMENT A

Cannon Road LP

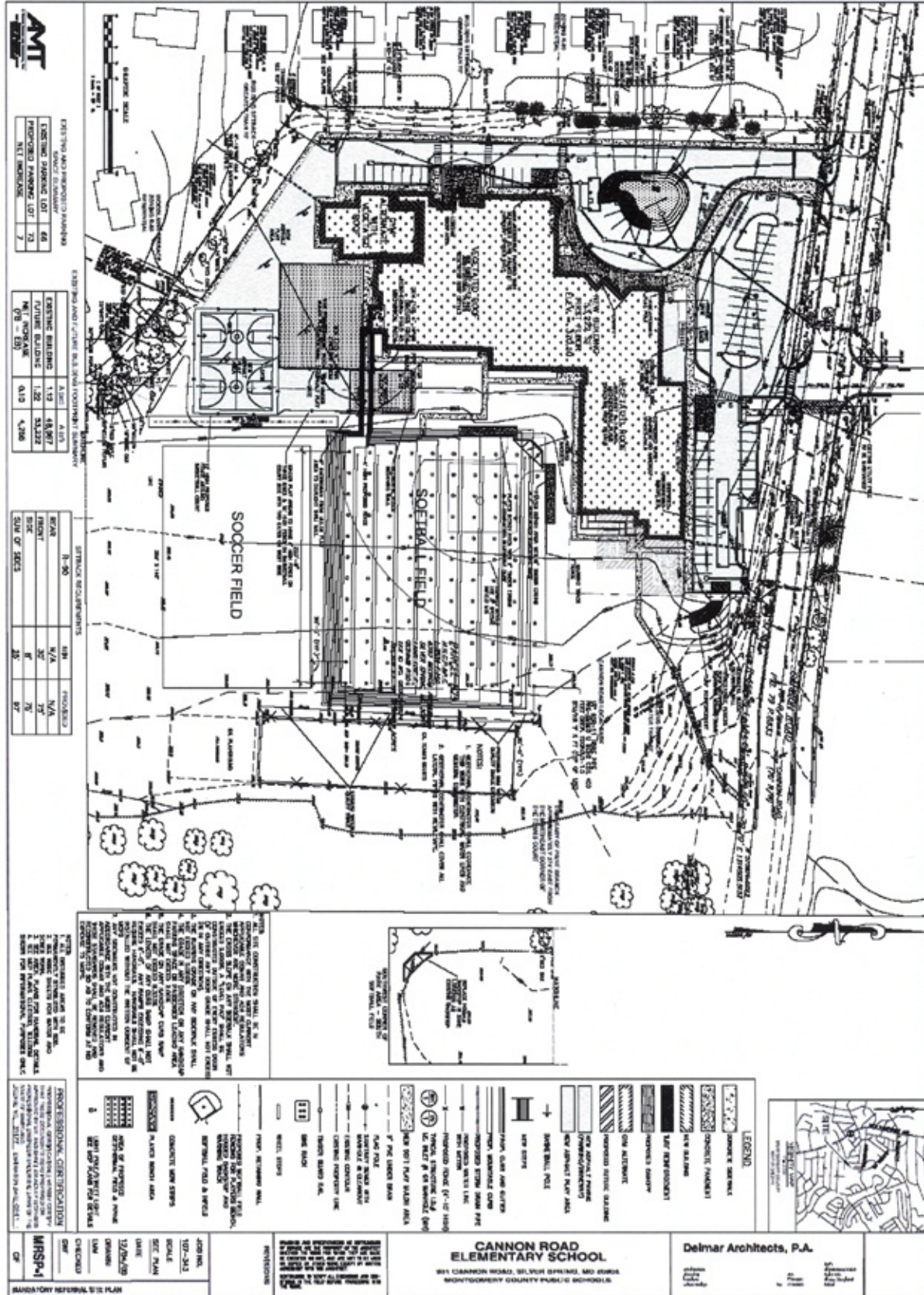
921 Cannon Road, Colesville, MD 20904



	Acreage	<u>26.806</u>	Region	<u>S</u>	 N 1" = 300'
	Facility Code	<u>D20</u>	Area	<u>ML</u>	

Date 06-29-2007

ATTACHMENT B



EXISTING AND PROPOSED PARKING

EXISTING PARKING LOT	66
PROPOSED PARKING LOT	7
NIT NUMBER	7

EXISTING AND FUTURE BLDG FOOTPRINT SUMMARY

EXISTING BUILDING	1.12	4.13
FUTURE BUILDING	1.22	5.22
NIT NUMBER	0.13	4.22

STRIKES REQUIREMENTS

STRIKES	1-30	1/4"	1/4"
STRIKES	30	1/4"	1/4"
STRIKES	30	1/4"	1/4"
STRIKES	30	1/4"	1/4"

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL PLUMBING CODE (IPC). THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND UTILITIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORD DRAWINGS THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND UTILITIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORD DRAWINGS THROUGHOUT THE PROJECT.

PROFESSIONAL CERTIFICATION

I, the undersigned, being a duly licensed Professional Engineer in the State of Maryland, do hereby certify that I am the author of the design and content of this drawing, and that I am a duly licensed Professional Engineer in the State of Maryland. My license number is 123456789. I am not providing this service as an agent, servant, or employee of any other person or entity. My only connection with any other person or entity is that of the professional relationship as defined in the Maryland Professional Engineers and Land Surveyors Act. I am not providing this service in violation of any applicable laws or regulations. I am not providing this service in violation of any applicable laws or regulations. I am not providing this service in violation of any applicable laws or regulations.

LEGEND

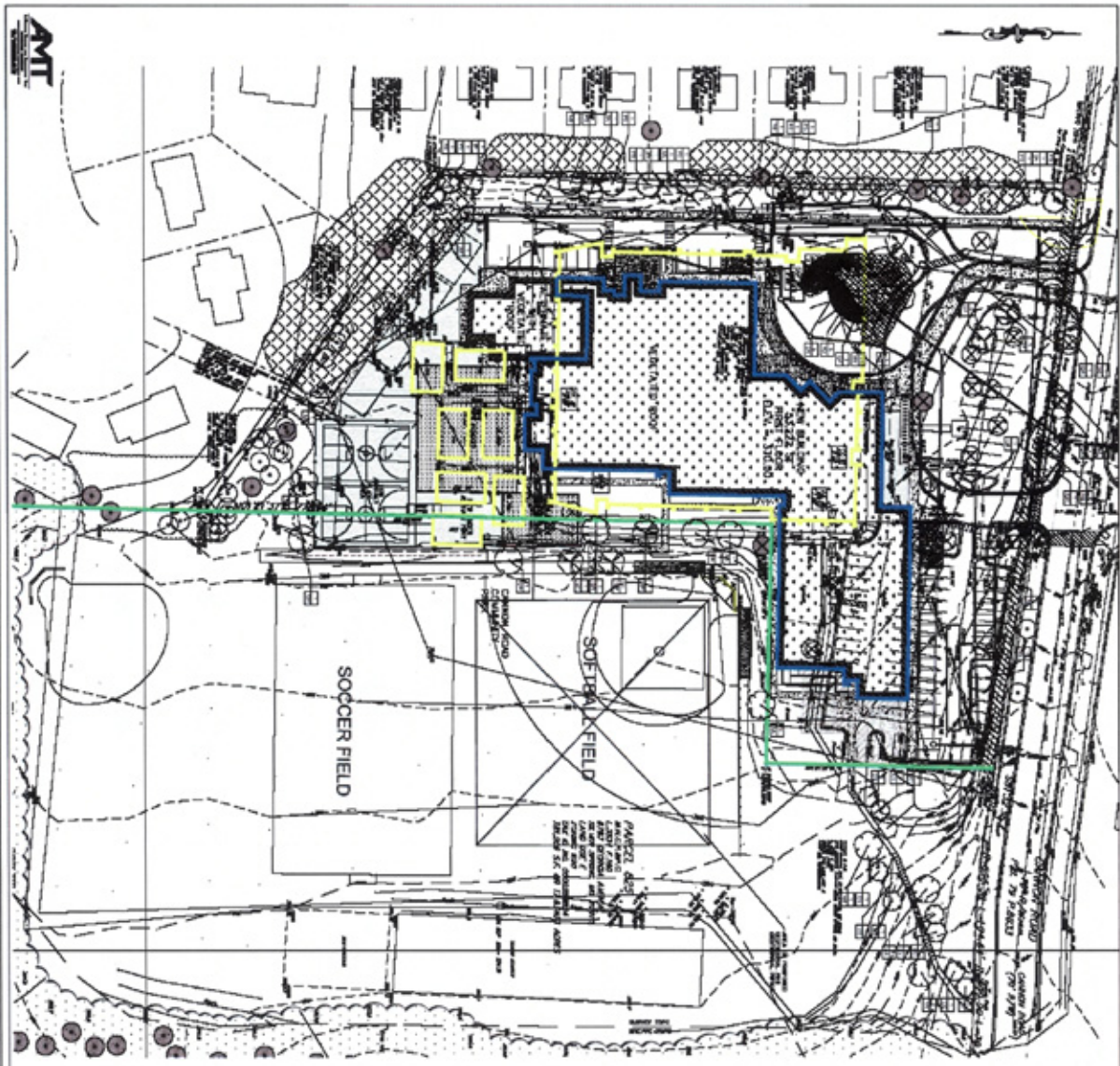
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CANNON ROAD ELEMENTARY SCHOOL
 501 CANNON ROAD, SILVER SPRING, MD 20904
 MONTGOMERY COUNTY PUBLIC SCHOOLS

Delmar Architects, P.A.
 1000 W. BROADWAY, SUITE 200
 DELMAR, DE 19701
 PHONE: 302.391.1234
 FAX: 302.391.5678
 WWW: DELMARARCHITECTS.COM

DATE: 12/20/2023
SCALE: AS SHOWN
SHEET: 101-101
PROJECT: CANNON ROAD ELEMENTARY SCHOOL
CLIENT: MONTGOMERY COUNTY PUBLIC SCHOOLS
DESIGNER: DELMAR ARCHITECTS, P.A.
CHECKED: [Signature]
DATE: 12/20/2023

ATTACHMENT C



PROJECT INFORMATION		DATE	
PROJECT NAME	CANNON ROAD ELEMENTARY SCHOOL	DATE	12/05/20
CLIENT	WORTHINGTON COUNTY PUBLIC SCHOOLS	DATE	12/05/20
DESIGNER	DELMAR ARCHITECTS, P.A.	DATE	12/05/20
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 WWW.DELMARARCHITECTS.COM

LSP-1
 LANDSCAPE PLAN
 JOB NO. 20-001
 SCALE 1/8" = 1'-0"
 DATE 12/05/20
 DRAWN BY [Name]
 CHECKED BY [Name]
 APPROVED BY [Name]