

Martin O'Malley Governor

Anthony G. Brown Lt. Governor



Margaret G. McHale Chair

> Ren Serey Executive Director

#### STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

December 15, 2008

Mr. Robert Schuetz City of Annapolis Department of Planning and Zoning 145 Gorman Street Annapolis, Maryland 21401

Re: Truxtun Park Recreation Center City of Annapolis Recreation and Parks Department

Dear Mr. Schuetz:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On December 3, 2008, the Critical Area Commission unanimously approved the City of Annapolis' proposal and site plan to redevelop the existing Truxtun Park Recreation Center on Hilltop Lane in Annapolis.

The approval was based on the mitigation package provided by the applicant described in the enclosed signed planting agreement. Please notify me once the planting plan has been implemented.

Please note that should any changes to the site plan be proposed in the future, additional review and approval by the full Commission will be required. Should you have any questions, please feel free to contact me at 410-260-3481.

Sincerely,

Amber Widmayer Natural Resources Planner

cc: AN 437-07

# Planting Agreement for State/Local Projects

State/Local Agency		Pr	oject Number					
City of Annapolis				2006005				
Agency Contact		Ph	one Number					
Rob Schuetz		4	10-263-79	)44				
Commision Approval Date		CA	C Planner					
		A	mber Wid	mayer				
Project Name								
Truxtun Park Recre	eation Center							
Project Location								
Hilltop Lane near G	Semini Drive							
Square Feet Cleared Outside 1	00th Buffor							
Removing 75 trees	our Builer	Mitigation Ratio for	Clearing Outsi	de Buffer				
		Dee sheet L-	T dated TU	-22-08				
		Mitigation Calculati	ion Outside Buf	fer				
		See sheet L-1 dated 10-22-08						
Square Feet Disturbed/Cleared	Within Buffer*	Mitigation Ratio for	Disturbance/Cl	earing Within Buffer*				
1216 st		2:1 by area						
15% Afforestation Requirement	t Met?	Mitigation Calculati	on Within Buffe	r				
Yes		1216 * 2 = 24	32 sf					
		Total Mitigation Rec	Wiremont					
		25 trees or 73	3 shrubs	7				
Planting and Natural Regenerat	ion Plan (attach addition			_				
See sheet L-1 dated 22	2 October 2008 fo	r proposed tree rer	moval and (	City of Appendia				
mitigation requirements	s. See sheet L-4 d	ated 22 October 2	008 for prop	oosed shrub planting				
(143 shrubs) to meet C	ritical Area buffer	mitigation requiren	nents. Buffe	er area is existing				
option to plant within or	In the DUffer Would	Id create more dist	urbance, sc	we request the				
		ice closer to the pr	oposed bui	liding.				
	Year							
all	200	99						
irst Site Visit Date	Completed by	Second Site Visit Dat	te	Completed By				
24-Oct-08								
ate Mitigation Complete	-							
Robert O. Schuetz		· 10,-10	1. 1	4				
)irector, Department of Cent	ral Services	(obull)	Chuils	In he ha				
esponsible Contact for Mitigation	on (Print)	Signature	X	Date				
see reverse for details		U	D	Revised 10/22/04				
				NOVISEU IVIZZ/04				

Martin O'Malley Governor

Anthony G. Brown Lt. Governor



Margaret G. McHale Chair

> Ren Serey Executive Director

#### STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

August 8, 2007

Mr. Dirk Geratz City of Annapolis Department of Planning and Zoning 145 Gorman Street Annapolis, Maryland 21401

Re: Annapolis Recreation Center

Dear Mr. Geratz:

Thank you for forwarding the above-referenced project proposal for the construction of a new recreation center in Truxtun Park. Currently the LDA portion of the property is 28% impervious, and the resulting total impervious surface area in the LDA portion of the property will be 42%. Because the proposed development will exceed the 15% impervious surface area maximum, the proposed project will need to be presented to the Critical Area Commission for conditional approval.

The City may seek a conditional approval from the Critical Area Commission for approval of a project on City lands under Code of Maryland Regulations 27.02.06 'Conditional Approval of State or Local Agency Programs in the Critical Area'. Under this section, if development proposed by a State or local agency located in the Critical Area is prohibited from occurring then the agency proposing the development may seek conditional approval for the project.

In order for the Critical Area Commission to process this request as a conditional approval, the applicant must submit information demonstrating how the proposed project meets the following criteria, which I understand Lisa Hoerger has emailed to you.

In order to qualify for consideration by the Commission for conditional approval, it shall be shown by the proposing or sponsoring agency that the project or program has the following characteristics:

Mr. Geratz August 8, 2007 Page Two

B.(1) That there exist special features of the site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

B.(2) That the project or program otherwise provides substantial public benefits to the Chesapeake Bay Critical Area Program;

B.(3) That the project or program is otherwise in conformance with this subtitle;

The conditional approval request shall, at a minimum, contain the following:

C.(1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State of local agency program or project;

C.(2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05;

C.(3) Measures proposed to mitigate adverse effects of the project or program or an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

In addition to providing the information above, a complete application will include any necessary State or local agency permits, a letter from Maryland Department of Natural Resources, Wildlife and Heritage Service stating that the proposed project will not impact rare, threatened or endangered species, and a letter from the Maryland Historical Trust that the proposed project will not impact any historic resources.

We recommend that the City consider reducing the proposed impervious area in the design. Also, please be aware that the Commission closely reviews such requests. Therefore, special attention should be paid to the proposed mitigation and how the project provides substantial public benefits to the Chesapeake Bay Critical Area Program.

As soon as we receive your complete application, we will be able to schedule the presentation of your proposed project on the agenda for a Critical Area Commission meeting. Projects must be received at least one month prior to the next scheduled Commission meeting in order to be included on that meeting agenda. The Commission meets on the first Wednesday of each month, and the schedule is posted at *http://www.dnr.state.md.us/criticalarea/aboutthecommission*.

Mr. Geratz August 8, 2007 Page Three

Please feel free to contact me at 410-260-3482 if you have any questions.

Sincerely,

Amber Widmayer Natural Resources Planner

cc: AN 437-07

## Critical Area Commission

STAFF REPORT December 3, 2008

APPLICANT:	The City of Annapolis' Recreation and Parks Department
PROPOSAL:	Truxtun Park Recreation Center Redevelopment
COMMISSION ACTION:	Vote
STAFF RECOMMENDATION:	Approval, with conditions
STAFF:	Amber Widmayer
APPLICABLE LAW/ REGULATIONS:	COMAR 27.02.06 Conditional Approval of State or Local Agency Programs in the Critical Area

#### **DISCUSSION:**

The Recreation and Parks Department of the City of Annapolis is proposing to redevelop the existing recreation center located at Truxtun Park off of Hilltop Lane. The property is identified as Tax Map 51 Parcel 15. The project includes the removal of the existing parking lots, basketball courts, playground and buildings. The existing development will be replaced with a larger recreation building, parking lots, basketball courts, outdoor amphitheater, and eight bioretention facilities. Within the 70 acre Truxtun Park property, the redevelopment project will take place on a 35.01 acre parcel, on which 27.03 acres are in the Critical Area. The Critical Area portion of the project site parcel with Critical Area designations is as follows: 15.88 acres are designated as a Resource Conservation Area (RCA), 9.88 acres are designated as a Limited Development Area (LDA) and 1.27 acres are designated as an Intensely Developed Area (IDA). The proposed disturbance within the Critical Area is approximately six acres and makes use of the existing footprint of development which is mostly within the LDA. The RCA and IDA portions of the site will not be impacted by the proposed development, with the exception of a new entry road will be constructed in the IDA of an adjacent parcel.

#### Lot Coverage

The redevelopment project requires a conditional approval by the Commission due to the extent of proposed lot coverage in the LDA. Currently, the RCA and the LDA on the property are developed with .07 acres and 2.77 acres of lot coverage, respectively. The total proposed lot coverage on the RCA and LDA is .07 acres and 4.18 acres, respectively, such that 42.3% of the LDA portion of the property will be developed as lot coverage, and with the LDA and RCA on the property combined, a total of 16.5% of the LDA and RCA will be developed as lot coverage.

While the proposed 1.14 acre lot coverage increase can not be developed on the property such that the Truxtun Park property is within the 15% lot coverage limit, the proposed project will provide a significant environmental improvement through establishing stormwater treatment facilities on a previously untreated site.

#### Tree Clearing within the LDA

There are 98 existing trees within the LDA that were planted as landscaping within the existing parking lot islands. Due to the extent of the redevelopment and reconfiguration proposed within the existing developed area in the LDA, significant clearing of the existing trees is required. However, the City's Critical Area program requires tree replacement based on the size of the tree removed such that either an equivalent sized tree will be provided, or that a greater number of trees of smaller size will be provided to replace a larger tree. As a result of the City's heightened planting requirements, the equivalent of 131 trees will be provided to mitigate for the 75 trees that will be removed. Also, 17 existing landscaping trees will be preserved, and 9 will be transplanted onsite.

#### Impacts to the 100-foot Buffer

There are two areas of disturbance within nontidal wetlands that are also within the 100-foot Buffer to tributary streams on the property and on the adjacent Salvation Army property for improvements to the existing outfalls. The proposed improvements include the construction of a plunge pool at each outfall. The area within the limits of disturbance within the 100-foot Buffer for these outfall improvements will be mitigated at a 2:1 ratio and is considered permitted disturbance within the 100-foot Buffer as a water dependent facility.

#### 10% Pollutant Reduction

Although no disturbance is proposed within the IDA on the Truxtun Park property, there is a small amount of disturbance proposed in the IDA on the adjacent Salvation Army property which fronts Hilltop Lane. In order to create safer vehicular access to both properties, the City proposes to reconfigure the two existing access drives into a single access drive that will serve both properties. The City has submitted the 10% pollutant reduction calculations for the proposed reconfiguration of existing impervious surface within this 5,375 square foot area on the Salvation Army property, and there is a resulting pollutant removal requirement of 0.03 pounds of phosphorus per year. The City proposes to address this requirement by providing an offset of six trees, which will address the 0.03 pound requirement, using the formula that 200 trees remove one pound of phosphorus per year.

#### Additional Considerations

The applicant has obtained letters of review for the proposed project from Maryland Department of Natural Resources' Wildlife and Heritage Service (WHS) and Maryland Historical Trust (MHT). The WHS letter does not indicate that any known rare, threatened or endangered species are located on the property that will be affected by the proposed project, and MHT's letter states that the construction of the proposed project will have no effect on historic and archeological properties.

The applicant has applied for a permit to disturb nontidal wetlands and the 25-foot buffer to

nontidal wetlands for improvements to two existing outfall pipes. The review of this application was postponed by MDE, and the City expects to receive the wetland permit prior to the date of the Commission meeting. Receipt of this permit will be made a condition of the project's approval by the Commission.

The applicant has received the necessary local stormwater and sediment erosion control permits in conjunction with the local grading permit application process.

#### **Conditional Approval Process**

In order to qualify for consideration by the Commission for conditional approval, it shall be shown by the proposing or sponsoring agency that the project has the following characteristics:

#### The responses are those of the applicant.

B.(1) That there exist special features of a site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

Since 1987, the City of Annapolis has planned to provide a centrally-located recreation facility at Truxtun Park to serve the increasing recreation needs of the City. In the meantime, the population of the City has grown by 10% and the City can not sufficiently provide the active recreation opportunities to serve the City's residents at its current downtown recreation facility and at Truxtun Park, due to a lack of parking and interior space. The new recreation center will enable the City to expand and increase programs to meet current and projected demand for recreational opportunities. The center will include an indoor gymnasium for a variety of sports, group exercise rooms, fitness areas, and meeting space. Along with the required parking areas, outdoor play features and other amenities, the proposed recreation center redevelopment can not be done within the existing footprint of development while staying within the 15% lot coverage limit. Therefore, the City must seek a conditional approval to complete the proposed project in order to provide the much needed recreational opportunities to its residents.

## *B.(2)* That the project otherwise provides substantial public benefits to the Critical Area Program;

Currently, there is no stormwater management for the proposed project site. The proposed redevelopment will provide eight bioretention areas, a cistern collection system for future irrigation of the athletic fields, improvements to the existing outfalls in the 100-foot Buffer by construction of the proposed plunge pools, and an increase in the number of trees planted on site. Additionally, the new recreation center building will be constructed such that it is a green building with a vegetated "green roof" which will retain and absorb additional stormwater runoff from the site that would otherwise be untreated and outfall to the nearby waterways. The applicant will also provide for a 10% reduction in pollutants in the form of plantings to address the proposed reconfiguration of the access road to serve the new recreation center and the adjacent Salvation Army property.

*B.(3)* That the project is otherwise in conformance with this subtitle; the conditional approval request shall, at a minimum, contain the following:

With the exception of the proposed development exceeding the 15% lot coverage limit within the LDA, the project is otherwise in conformance with the City and State Critical Area regulations.

C. (1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized local agency program or project;

Without the requested conditional approval, the City would not be able to provide a new recreation center building and its required parking and amenities that would be sufficient to serve the existing and future need of the City's residents. The LDA on the property is currently developed such that it exceeds the 15% lot coverage limit, and as is, there is insufficient parking and indoor recreation space in Truxtun Park and in the City as a whole to serve the City's needs.

## C. (2) A proposed process by which the project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program;

While the proposed recreation center can not be developed in conformance with the 15% lot coverage limits, the proposed redevelopment will provide a significant water quality improvement by providing an abundance of stormwater management facilities on a site which currently has none. These stormwater treatment improvements include eight bioretention facilities to treat the runoff from parking lots and the building, a green roof on the building itself, a cistern collection system under the athletic field to provide for future irrigation of the field as well as collecting stormwater runoff, and through providing a significant increase in the number of trees that will be provided on the property.

### C. (3) Measures proposed to mitigate adverse effects of the project.

As described above, the numerous proposed stormwater treatment improvements provide a significant improvement in the quality of the stormwater runoff that currently leaves the site. This water quality improvement serves to minimize the Critical Area impact of the lot coverage on the LDA portion of the site. Additionally, the City proposes to mitigate for all of the trees that will be cleared such that there will be a significant increase in the number of trees in the LDA, a 10% pollutant reduction will be provided for the disturbance within the adjacent property's IDA for the new entry road, and the impacts in the 100-foot Buffer for the proposed outfall improvements will be mitigated with plantings at a 2:1 ratio as well.

The Commission shall approve, deny, or request modifications to the request for conditional approval based on the following factors:

*E.(1)* The extent to which the project or program is in compliance with the requirements of the relevant chapters of this subtitle;

E.(2) The adequacy of any mitigation measures proposed to address the requirements of this subtitle that cannot be met by the project or program; and

E.(3) The extent to which the project or program, including any mitigation measures, provides substantial public benefits to the overall Critical Area Program.

#### **Staff Recommendation**

Commission staff recommends that the project be approved with the following condition:

1. The City of Annapolis shall provide a signed planting agreement within 30 days of Commission approval demonstrating that the proposed replanting mitigation, Buffer mitigation, and 10% plantings will be provided as proposed.

# TRUXTUN PARK RECREATION CENTER GRADING & SEDIMENT CONTROL / STORMWATER MANAGEMENT PLANS



3. Obtain Sediment Cantral Inspector's appravol that all sediment and erosian contral devices have been installed carrectly. Contractor to do weekly pre- and post starm inspections on an ongoing basis.

4. With the Inspector's opproval, begin demalitian, clearing ond raugh grading af site within the limits af disturbonce. Note designated stockpile areo shown on the ....(4 Weeks plans. .....

5. Mechanicolly stobilize all heavy use areas, including staging zones, loy-dawn zones ond trovel lanes. These oreas must be maintained thraughaut the ....(2 Weeks) construction process. .....

6. Begin building construction. Note that building construction cannot proceed post the graund flaor until oll remaining disturbed areas have been permonently ar temporarily stabilized. All areas being temporarily ar permanently stabilized with vegetatian shall be per the Anne Arundel Sail Canservation District Detoils for Vegetative Establishment. During building construction beyond the ground floar, all disturbed areas must be stabilized at the end of each business day. ......(4 Weeks)

7. Cantinue fine groding of site ond begin canstructian of on-site utilities, including the proposed storm droin system. Remave existing starm droin system ond designoted portions of existing water and sewer lines os shown on the plons. Complete installation of utilities. Install proposed curb & gutter os indicated on the plans (except in areas sof sediment traps). Instoll stone base far all porking areas ond drivewoys and fully stabilize the site (except in areas of sediment .....(8 Weeks trops).

8. Canstruct athletic focilities. After droinage areas to trops are permonently stabilized and with inspectars oppraval traps may be phosed out. Trop #1 moy be phosed aut only ofter entire drainage area is permanently stabilized, then construct entrance at Gemini Drive. After Trap #1 is phased aut mechanicolly or vegetotively stabilize all disturbed oreas ot the end of each day during Gemini Drive entronce construction.

9. Once the site is fully stobilized, with the Inspectors' approval, continue building construction beyond the ground floor. [Note: Approvol far building canstructian beyond the ground floor may be obtained priar to campletion of all utilities, curb & gutter, etc. if all remoining disturbed areas have been permanently or temporarily stabilized. Utilities, curbing and paving may occur at any time during the sequence as lang os oll disturbances ore returned to their stobilized condition at the end of each wark day. Relief moy be gronted by an inspector fram the need to stabilize the site at the end of a particular work day if unique circumstonces exist thot would create an undue hardship an the developer ta stobilize the site and the inspectar is convinced that weather conditians over the next twenty-faur hours would not result in the creation of soil erosian or ......(8 Weeks) sediment movement within the site.].

10. Upon completion af construction, permanently stabilize the site os required by the plan. .....(1 Week)

11. Contoct the City Sediment Control Inspector for opproval ta remove the remaining sediment cantrols and stabilize affected areas. Once all contributing oreas are stabilized, install SWM Bioretention devices. Cantact engineer priar to canstruction far SWM inspection certificatian. Stabilize remoining disturbed areas. ......(1 Week)



CRITICAL AREA LINE

PROPOSED SPOT ELEV.

272+

TOTAL SITE AREA = 1,524,897 S.F. (35.01 Ac.)
EXISTING/PROPOSED ZONING - R2
MINIMUM LOT SIZE: AS SPECIFIED BY THE DECISION-MAKING BODY OR OFFIC
MAXIMUM F.A.R .: AS SPECIFIED BY THE DECISION-MAKING BODY OR OFFICIA
BUILDING SETBACKS (R2): AS SPECIFIED BY THE DECISION-MAKING BODY C
DARKING SPACES REQUIRED. SPACES FOR 30% BUILDING CAPACITY IN PERS
PARKING SPACES REGORED. 205 SPACES TOTAL
(INCLUDING 7 HANDICAP; 2 COMPACT; 11 ALTERNATIVE FUEL;
TOTAL DISTURBED AREA = $264,615$ S.F. (6.07 Ac.)
AREA TO BE STRUCTURALLY STABILIZED = $191.243$ S.F. (4.39 Ac.)

INLET PROTECTION

EX. STREAM



- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH CITY OF ANNAPOLIS STANDARD DETAILS AND SPECIFICATIONS FOR CONSTRUCTION (AUGUST 1988), AND ALL ADDENDA THERETO
- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOF TO CONSTRUCTION. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS AND ANY DAMAGE TO THEM SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS: -CITY OF ANNAPOLIS DEPT. OF NEIGHBORHOOD & ENVIRONMENTAL PROGRAMS (410)263-7946
  - -CITY OF ANNAPOLIS DEPARTMENT OF ENGINEERING & CONSTRUCTION (410)263-7949
  - -CITY OF ANNAPOLIS DEPARTMENT OF UTILITIES (41D)263-7970
  - -MARYLAND DEPARTMENT OF THE ENVIRONMENT (410)631-3150 -MISS UTILITY (80D)257-7777
  - -BGE (800)685-D123 -VERIZON (410)954-6230
- THE CONTRACTOR MUST ALLOW TRAFFIC MOVEMENT ALONG HILLTOP LANE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR DUST AND MUD ON HILLTOP LANE DUE TO VEHICLES ARRIVING AND LEAVING THE SITE. STREETS ARE TO BE MAINTAINED AND KEPT FREE OF DEBRIS AND DIRT ON A DAILY BASIS.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE CONTRACTOR SHALL NOTE THAT IN CASE OF DISCREPANCY BETWEEN THE SCALED AND THE DIMENSIONS SHOWN ON THESE DRAWINGS, THE DIMENSIONS SHALL GOVERN.
- THE OWNER/DEVELOPER SHALL PROVIDE FOR REGULAR INSPECTIONS, CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER, TO BE CONDUCTED DURING CONSTRUCTION OF STORMWATER MANAGEMENT SYSTEMS IN ACCORDANCE WITH ACCEPTED DESIGN
- IF APPLICABLE, A GEOTECHNICAL ENGINEER SHALL PERFORM FULL-TIME INSPECTION DURING THE EXCAVATION AND INSTALLATION OF INFILTRATION SYSTEMS. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE "1994
- PUBLISHED JOINTLY BY THE WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE.
- OF EXISTING UTILITIES AND POWER POLES. REQUIRED RELOCATIONS ARE TO BE DONE AT DEVELOPER'S EXPENSE.
- OF ANNAPOLIS CONTROL, USING MONUMENT 18366, ELEV. 37,52. LOCATION AND TOPOGRAPHIC SURVEY SUPPLIED BY DRUM, LOYKA & ASSOCIATES, LLC FROM FLOWN AERIAL TOPOGRAPHY & SUPPLEMENTAL FIELD RUN SURVEYS.
- TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY AASHTO METHOD T-180, MODIFIED.
- ACCEPTABLE COMPACTED FILL SHALL BE PLACED IN SIX-INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY AASHTO METHOD T-180, MODIFIED. COMPACTION TEST RESULTS CONDUCTED BY AN INDEPENDENT TESTING LAB AND SEALED BY A REGISTERED ENGINEER ARE TO BE SUBMITTED TO THE CITY OF ANNAPOLIS. PRIOR TO PLACEMENT OF COMPACTED FILL, ANY SOFT OR OTHERWISE UNSUITABLE SOILS ENCOUNTERED SHALL BE UNDERCUT AND REMOVED FROM THE CONSTRUCTION AREA.
- SIDEWALK RAMPS SHALL BE INSTALLED AT THE LOCATIONS INDICATED PER MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS MD 655.11 AND MD 655.12. PROVIDE INTEGRAL DETECTABLE WARNING SURFACE PER MD 655.40.
- UNLESS OTHERWISE NOTED, ALL SEWER PIPE SHALL BE PVC (POLYVINYL CHLORIDE), A.S.T.M. D-3034, SDR-26. SEWER CONNECTION TO PROVIDE MINIMUM STANDARD 2% SLOPE TO THE CONNECTION AT THE BUILDING.
- UNLESS OTHERWISE NOTED, ALL WATER PIPE SHALL BE DUCTILE IRDN PIPE CL-50 WITH TYTON OR APPROVED STANDARDIZED MECHANICAL JOINTS. FIRE HYDRANT IS TO BE PAINTED SAFETY YELLOW, AND RISER PIPE PAINTED GLOSS BLACK. SEE CITY OF ANNAPOLIS STANDARD DETAIL W15.0 FOR INSTALLATION DETAILS.
- DISTURBANCE WITHIN HILLTOP LANE MUST BE STABILIZED IMMEDIATELY USING STEEL PLATES LAID FLUSH WITH THE PAVEMENT. PERMANENT PAVEMENT PATCHING IN THESE AREAS WITH HOT MIX BITUMINOUS MATERIAL MUST BE COMPLETED WITHIN 5 DAYS TO MATCH THE EXISTING PAVEMENT SECTION.
- CONTRACTOR IS TO LIMIT DAILY UTILITY WORK TO THAT WHICH CAN BE EXCAVATED, CONSTRUCTED AND STABILIZED IN ONE WORKING DAY. PIPE OPENINGS SHALL BE PLUGGED AT THE END OF THE DAY. USE CITY OF ANNAPOLIS STANDARD PIPE RENCH DETAIL G1.D.

## SHEET INDEX

SHEET 1 - Civil Dwg C-1 - COVER SHEET
SHEET 2 - Civil Dwg C-2 - DEMOLITION / EXISTING FEATURES PL
 SHEET 3 - Civil Dwg C-3 - SITE PLAN
SHEET 4 - Civil Dwg C-4 - GEOMETRIC & PAVING PLAN
SHEET 5 - Civil Dwg C-5 - STORM DRAIN DRAINAGE AREA MAPS
SHEFT 6 - Civil Dwg C-6 - OUTFALL DETAILS
SHEET 7 - Civil Dwg C-7 - STORM DRAIN PROFILES
SHEET 8 - Civil Dwg C-8 - STORM DRAIN PROFILES
SHEET 9 - Civil Dwg C-9 - STORIG DRAM TROTILLS, NOT LS & DE
SHEET 10 CHILDER C 10 STODAWATED MANACEMENT NOT
SHEET IU - CIVIL DWG C-10 - STORIWWATER MANAGEMENT NOT
SHEET 11 - Civil Dwg C-11 - GRADING & SEDIMENT CONTROL DDAINAGE AREA MAPS
SUPET 12 Chill Date C 12 CDADINC & SEDIMENT CONTROL
PLAN PHASE I EXISTING CONDITIO
SHEET 13 - Civil Dwg C-13 - CRADING & SEDIMENT CONTROL
PLAN PHASE II PROPOSED CONDIT
SHEET 14 - Civil Dwg C-14 - SEDIMENT CONTROL NOTES & DETA
SHEET 15-Landscape Dwg L-1-TREE PRESERVATION & PROTEC
SHEET 16-Landscape Dwg L-2-EXISTING TREE INVENTORY
SHEET 17-Landscape Dwg L-3-HARDSCAPE PLAN
SHEET 18-Landscape Dwg L-4-PLANTING PLAN
SHEET 19-Landscape Dwg L-5-BIORETENTION AREA ENLARGEM
SHEET 20-Landscape Dwg L-6-GREEN ROOF
SHEET 21-Landscape Dwg L-7-DETAILS
SHEET 22-Landscape Dwg L-7-PLANTING DETAILS

 $(\mathbf{r})$ 

S.C.E.

EXISTING SEWER MANHOLE

STABILIZED CONSTRUCTION ENTRANCE







![](_page_15_Figure_0.jpeg)

![](_page_16_Figure_0.jpeg)

80 LOYKA ATES, I N.S. RU SS AA X CIVII X N Con State "Prof that t appre licen licen laws licen ANNAPOLIS fion & parks maryland 21401 OF CITY ATION CENTER 6TH DISTRICT ND 21401 15 IS RE 00000 06-000-v GRID 4 PI ANNAPOLIS DAENT CON PARK MAP 511 CITY OF GRADING & SED TRUXTUN TAX These drawings are the property of Drum, Loyka & Associates, LLC. Unauthorized reproduction for any purpose is not permitted and is an infringement upon copyright laws. Violators will be subject to prosecution to the fullest extent of the law. REVISION IO. DESCRIPTION OCT 2 1 2008 DLA Project No. - AA14501 DATE: OCTOBER 8, 2008 SCALE: AS SHOWN SHEET NUMBER: 2 0 U-hSHEET \_\_\_\_\_\_ OF \_\_\_\_22\_\_\_\_

![](_page_17_Figure_0.jpeg)

![](_page_17_Figure_3.jpeg)

SCALE: HORIZONTAL: 1"=40' VERTICAL: 1"=4'

SCALE: HORIZONITAL: 1"=40' VERTICAL: 1"=4'

![](_page_17_Picture_6.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_18_Figure_1.jpeg)

ROOFD	RAIN SU	MM					
PIPE SIZE (IN.)	TYPE	LENGTH					
3"	P.V.C.	31'					
<b>4</b> "	P.V.C.	11:					
6"	P.V.C.	14					
8"	P.V.C.	47					
10"	P.V.C.	99					
12"	P.V.C.	64					
	TOTAL	92					
PIPE SUMMARY							
PIPE SIZE (IN.)	TYPE	LENGTH					
6"	P.V.C.	60					
12"	S.D. R.C.P. CLASS III	24					
15"	S.D. R.C.P. CLASS III	71					
15" 15"	S.D. R.C.P. CLASS III S.D. R.C.P. CLASS IV	71 42					
15" 15" 18"	S.D. R.C.P. CLASS III S.D. R.C.P. CLASS IV S.D. R.C.P. CLASS IV	71 42 19					
15" 15" 18"	S.D. R.C.P. CLASS III S.D. R.C.P. CLASS IV S.D. R.C.P. CLASS IV TOTAL	71 42 19 1,1					

	NUMBER	TYPE	PIPE SIZE	TOP ELEV.	IN UPPER	IV. ELEV	LOWER	C.O.A. STD. DETAIL	LOCATION	AS-BUILT LOCATION	N
	M-101	TYPE 'A' MANHOLE	15" R.C.P.	47.5	38.25	- <u></u>	38.0±	<b>G</b> 6.0	N 17,062.35 E 22,580.16		
	I-102	INLET WITH SLAB	15" R.C.P.	47.5	41.6	39.8	39.7	D28.0	N 17,028.40 E 22,592.61		
	M-103	TYPE 'A' MANHOLE	15" R.C.P.	49.3	42.0		41.9	G6.0	N 16,955.50 E 22,443.81		
	M-104	TYPE 'A' MANHOLE	15" R.C.P.	51.0	43.4		43.15	G6.0	N 16,863.02 E 22,384.34		
	S-105	CISTERN	12" R.C.P.		44.0		43.5		N 16,837.05 E 22,367.53		SEE (THIS
	I-106	YARD INLET WITH GRATE	12" R.C.P.	49.5	46.3		46.2	D29.0	N 16,695.95 E 22,421.99		
A B   4" 10.50"   6" 11.50"	I-107	YARD INLET WITH GRATE	12" R.C.P.	49.0			47.0	D29.0	N 16,634.48 E 22,440.95		
8" 11.50"   10" 11.25"   12" 6.00"	M-110	TYPE 'A' MANHOLE	18" R.C.P.	33.0	24.0	23.0	22.6±	G6.0	N 17,095.54 E 22,093.78		
DELINE	I-111	INLET WITH SLAB	15" R.C.P.	33.0	27.1		25.5	D28.0	N 17,092.65 E 22,051.62		
	I-112	INLET WITH SLAB	15" R.C.P.	34.0	28.1	26.55	26.3	D28.0	N 16,934.99 E 21,993.06		
	M-113	TYPE 'A' MANHOLE	15" R.C.P.	37.0	27.4		27.3	G6.0	N 16,870.55 E 22,001.24		
RETE SLAB MUST BE DESIGNED CAL SOIL CONDITIONS, TRAFFIC	M-114	TYPE 'A' MANHOLE	15" R.C.P.	39.5	28.5		28.4	G6.0	N 16785.21 E 22129.98		
ESIGN FACTORS.	I-115	INLET WITH SLAB	15" R.C.P.	36.0	30.1	29.0	28.9	D28.0	N 16,772.50 E 22,168.38		
ET ADAPTERS	M-116	A.A.Co. TYPE 'B' MANHOLE	15" R.C.P.	44.0	40.9	40.7	40.2	A.A.Co. DETAIL D-13	N 16,757.50 E 22,202.87		SEE (THIS
0R DUAL WALL), & RIBBED PVC	I-117	TYPE 'H' INLET	15" R.C.P.	43.35	41.2		41.1	D27.0	N 16,734.86 E 22,228.32		
	I-118	TYPE 'H' INLET	15" R.C.P.	45.0			41.5	D27.0	N 16,708.23 E 22,270.90		
	I-119A	NYLOPLAST 12" INLINE DRAIN	8" P.V.C.	33.9	31.8		31.7		N 16790.95 E 22180.83		SEE (THI
	I-119B	NYLOPLAST 12" INLINE DRAIN	8" P.V.C.	33.9			32.0		N 16781.04 E 22195.77		SEE (THI
	M-120	TYPE 'A' MANHOLE	15" R.C.P.	33.7	26.0		20.94±	G6.0	N 17,115.72 E 22,113.06		
E DUCTILE IRON PER ASTM A536 GRADE 70-50-05 ONZE GRATE.	I-121	INLET WITH SLAB	15" R.C.P.	37.0	31.1	29.0	28.9	D28.0	N 17,160.90 E 22,214.78		
PER ASTM A536 GRADE 70-50-05 DINT TIGHTNESS SHALL CONFORM TO ASTM D3212 HANCOR DUAL WALL) & SDR 35 PVC	M-122	TYPE 'A' MANHOLE	15" R.C.P.	42.5	37.0	30.9	30.8	G6.0	N 17095.03 E 22289.58		
3130 VERONA AVE	1-123	INLET WITH SLAB	15" R.C.P.	47.0	41.1		39.8	D28.0	N 17,005.06 E 22,386.49		
PHN (770) 932-2443 FAX (770) 932-2490	I-124A	NYLOPLAST 12" INLINE DRAIN	8" P.V.C.	33.9	31.8		31.7		N 17059.88 E 22266.17		SEE (THI
	I-124B	NYLOPLAST 12" INLINE DRAIN	8" P.V.C.	33.9			32.0		N 17042.48 E 22254.55		SEE (THI