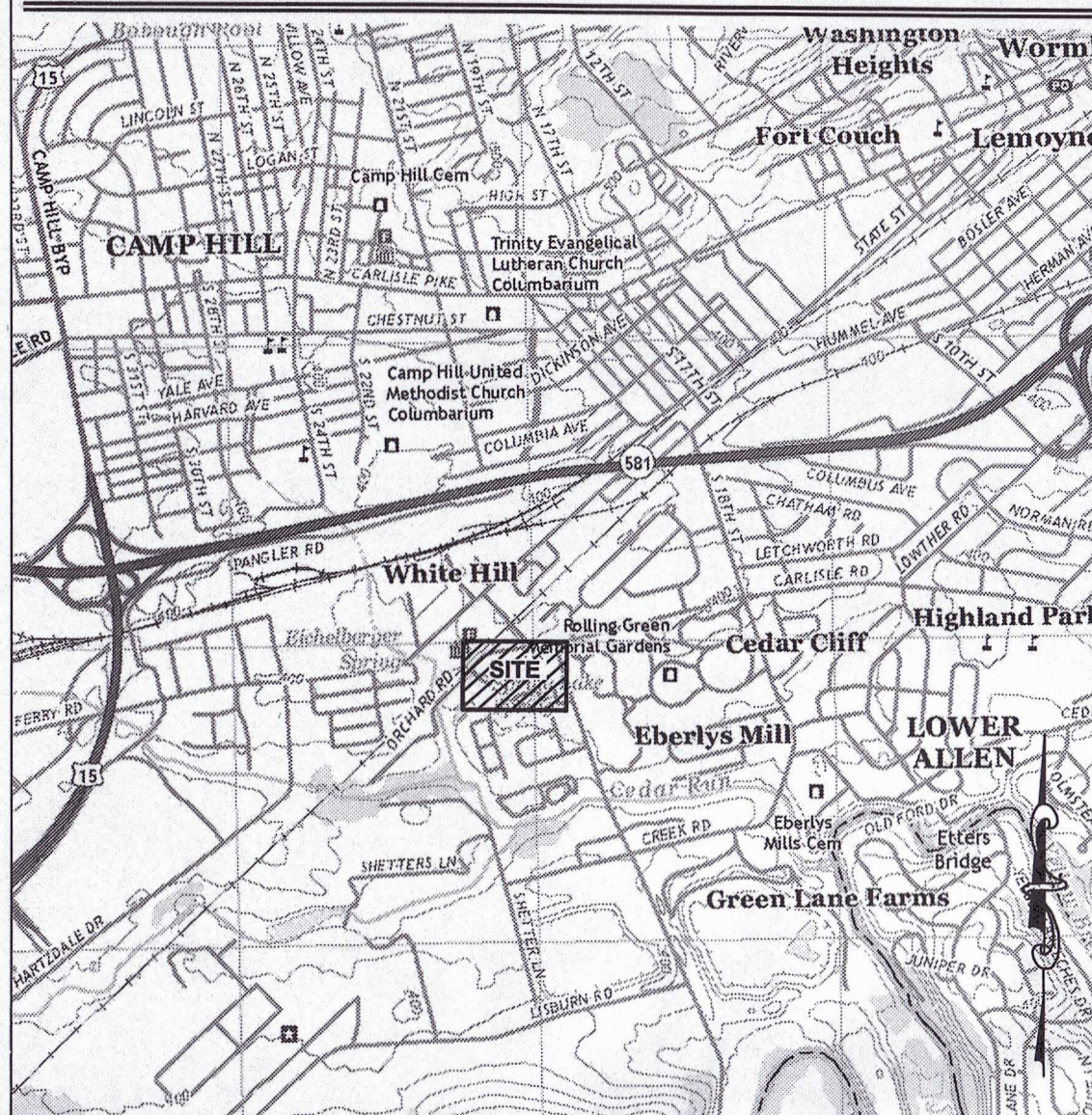


VICINITY MAP

SCALE: 1" = 2000'

USGS MAPS (Lemoine, PA 2019)



PROJECT STATEMENT

The purpose of this plan is for the construction of a apartment building at the intersection of Orchard Road and Carlisle Road. This work is proposed in addition to the phase I remodel of the existing office building. Included in this phase II is an 8,000 sq. ft. building with permeable parking area, utilities, landscaping and stormwater management bmp's.

WAIVERS

A waiver has been granted by the Lower Allen Township Board of Commissioners at a regularly scheduled meeting on March 27, 2023 for the following:

1. Section 192-30.A(1): Preliminary plan submission
2. Section 192-57.C.8: Requiring the installation of curb along Orchard Road and Carlisle Road
3. Section 192-57.C.13.c1: Widen abutting streets to the development that don't meet Township standards.
4. Section 192-57.C.9: Requiring the installation of sidewalk along Orchard Road and Carlisle Road

EXPECTED PROJECT SCHEDULE

It is expected that following Township approval and after all of the necessary permits have been granted, construction will begin in summer of 2023. Construction is expected to take 12 months and following construction, all necessary permits will be terminated.

NOTICE TO CONSTRUCT SIDEWALKS

A request of deferment of installation of sidewalks has been requested by the Lower Allen Township Board of Commissioners. The following note is from the Township Ordinance Chapter 187-22 addressing a notice of construction:

1. All owners of property abutting on any street or highway in the township, upon 60 days' notice to do so from the Board of Commissioners through the Township Secretary, shall construct, grade, pave, curb, repave and recurb the sidewalks along such property, and upon failure of such owner or owners to comply with such notice or without notice to the property owner or owners as above provided, the township shall in either case cause the same to be done and shall levy and collect the costs thereof from such owner or owners. The cost of any such grading, paving, curbing, repaving and recurbing shall be a lien upon the premises from the time of the commencement of the work, which date shall be fixed by the Township Engineer and shall be filed with the Township Secretary. Any such lien may be collected by action of assumpsit or by lien filed in the manner provided by law for the filing and collection of municipal claims.

PRELIMINARY / FINAL MINOR SUBDIVISION AND
LAND DEVELOPMENT PLAN

FOR

SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION
OF CARLISLE ROAD AND ORCHARD ROAD
LOWER ALLEN TOWNSHIP

CUMBERLAND COUNTY, PENNSYLVANIA

OWNER/DEVELOPER:
BANE II INVESTMENTS, LLC
10 KASEY COURT
MECHANICSBURG, PA 17055

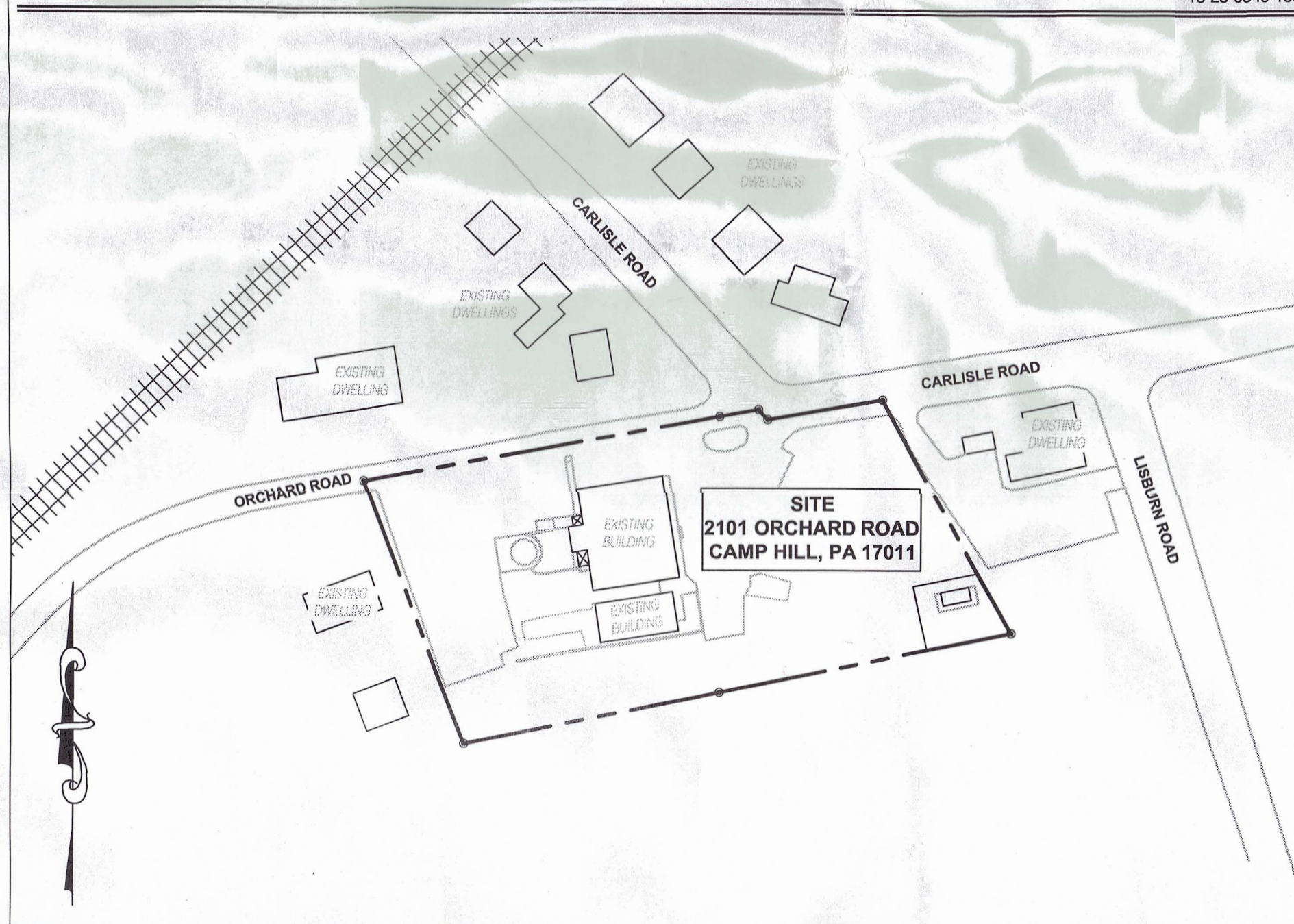
C/O: MIKE WEIDNER
EMAIL: mike@weidnerconstruction.com
PHONE: (717) 446-4141

CIVIL ENGINEER / SURVEYOR:
FSA INC.
505 SOUTH HANOVER STREET
CARLISLE, PA 17013

PROJECT MANAGER: JUSTIN DOTY
EMAIL: jdoty@fsa-inc.com
PHONE: (717) 701-8111

LOCATION PLAN

SCALE: 1" = 100'

TAX MAP - GRID - PARCEL:
13-23-0549-138

INITIAL SUBMISSION: November 21, 2022

FINAL TOWNSHIP BOARD OF COMMISSIONERS APPROVAL: March 27, 2023

SHEET INDEX

TYPE	NUMBER	TITLE
C-001	SHEET 01	COVER SHEET
C-002	SHEET 02	NOTES AND LEGENDS
V-101	SHEET 03	EXISTING CONDITIONS PLAN
V-102	SHEET 04	SUBDIVISION PLAN
C-101	SHEET 05	LAYOUT AND DIMENSION PLAN
C-102	SHEET 06	GRADING AND UTILITY PLAN
L-101	SHEET 07	LANDSCAPE PLAN
C-501	SHEET 08	SITE DETAILS
ESC-001	SHEET 09	EROSION AND SEDIMENT CONTROL PLAN
ESC-002	SHEET 10	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 11		EROSION AND SEDIMENT CONTROL DETAILS
PCSM-001	SHEET 12	POST CONSTRUCTION STORMWATER PLAN
PCSM-002	SHEET 13	POST CONSTRUCTION STORMWATER NOTES & DETAILS

BY OTHERS:
PHT-001

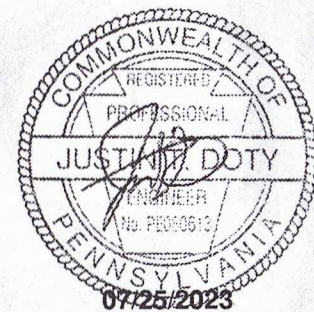
PHOTOMETRIC AND LIGHTING PLAN

APPROVALS

ENGINEER'S CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Pennsylvania. The Engineer has been to the site and observed the present condition and this plan indicates that actual condition of the plan, and to the best of my knowledge and belief it is true and correct, and the township may rely upon the accuracy thereof.

Justin T. Doty
Professional Engineer
License No. PE080613
Expiration Date: 9/30/2023

7-25-23
Date

RECORDER OF DEEDS

This plan was recorded in the Cumberland County courthouse on this 21st day of March, 2023.
Instrument Number

LOWER ALLEN TOWNSHIP BOARD OF COMMISSIONERS APPROVAL

Approved by the Lower Allen Township Commissioners and all conditions imposed with respect to such approval were completed on this 27th day of March, 2023.
Chairman: Debra W. Villone
Secretary: Robert J. Weidner

LOWER ALLEN TOWNSHIP PLANNING COMMISSION APPROVAL

Approved by the Lower Allen Township Planning Commission and all conditions imposed with respect to such approval were completed on this 27th day of March, 2023.

Chairman

Secretary

CUMBERLAND COUNTY PLANNING COMMISSION

Reviewed by the Cumberland County Planning Department on this 9th day of December, 2023.
Director of Planning: Kirk Stoner

OWNER'S STATEMENT OF ACKNOWLEDGEMENT

It is hereby certified that the undersigned has legal or equitable title to the land shown hereon, and all streets, if not previously dedicated, are hereby dedicated to the public.

Property ID #: 13-23-0549-138

Owner: Bane II Investments, LLC

c/o Mike Weidner, President

Signature: Michael J. WeidnerDate: 2/26/23State of: PennsylvaniaCounty of: CumberlandOn this 21st day of March, 2023, Before MeNotary Public - Print Name: STEPHEN J. BINI

The Undersigned Officer, Personally Appeared

Owner - Print Name: MICHAEL JAMES WEIDNER

Known to me to be the person(s) whose name is subscribed above and acknowledge that they executed the same for the purpose hereon contained.

In witness whereof, I hereunto set my hand and official seals.

Signature: Stephen J. Bini

Notary Public

Commonwealth of Pennsylvania - Notary Seal
Stephen J. Bini, Notary Public
Cumberland County
My commission expires September 28, 2028
Commission number: 1387289

TOWNSHIP STORMWATER MANAGEMENT CERTIFICATION

On behalf of Lower Allen Township, I, Justin Doty, have reviewed and hereby certify that the Stormwater management site plan meets all design standards and criteria of the Municipal Ordinance No. Chapter 184.

Signature

7-25-23
Date

OWNER'S STORMWATER MANAGEMENT STATEMENT

I hereby acknowledge that all stormwater management facilities and best management practices (BMPs) are permanent features and can only be altered or removed after approval of a revised plan by the municipality.

Owner: Bane II Investments, LLC

c/o Mike Weidner

Signature: Michael J. WeidnerDate: 2/26/23

TAX PARCEL # : 13-23-0549-138

Know what's below.
Call before you dig.

SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION
OF CARLISLE ROAD AND ORCHARD ROAD

LOWER ALLEN TOWNSHIP

CUMBERLAND COUNTY, PENNSYLVANIA

Bane II Investments, LLC c/o Mike Weidner
10 Kasey Court, Mechanicsburg, PA 17055
717.446.4141

PROJECT NO.	2022-0012
DWN BY	CMH
DATE	6-29-2023
PROJECT MANAGER	JTD
EMAIL	jdoty@fsa-inc.com
PROPERTY ID #	13-23-0549-138
SCALE	NTS
SHEET TITLE	COVER SHEET

COVER
SHEETC-001
SHEET 01 OF 13

Justin T. Doty

Digitally signed by Justin T. Doty
Date: 2023.07.25 17:38:36 -0400

CONTRACTOR NOTES

- The contractor shall be responsible for obtaining any permits from the municipality relative to the construction proposed on this plan.
- The contractor shall be responsible for replacement of damaged or destroyed existing landscape and/or site features which are to remain.
- Plan location and dimensions shall be strictly adhered to unless otherwise directed by the Owner's representative.
- Prior to building stakeout, contractor shall verify dimensions set forth on the latest architectural plans.
- All construction to conform to the municipal and/or County ordinances and specifications. It is the contractor's responsibility to be aware of applicable standards and specifications as well as the required methods of construction. All deviations from the plans must be approved prior to construction.
- The contractor shall be responsible for all traffic control, trench barricading, covering, sheeting and shoring, in accordance with applicable Federal, State and Local regulations. Maintenance and protection of traffic along the existing roads neighboring the project is the sole responsibility of the contractor. All M&P Plans and procedures shall be in accordance with Township and/or PennDOT standards.
- The contractor shall check and verify all existing site conditions and dimensions prior to construction. Any discrepancies between the plans and actual field conditions shall be reported to Frederick, Seibert and Associates (FSA) prior to construction.
- The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage done due to the contractor's negligence shall be immediately and completely repaired at the contractor's expense. Existing utilities, roads, driveways, and structures shown are from the best available records and shall be verified by the contractor to their satisfaction prior to construction.
- Dimension and geometry shown on this plan shall be verified during stake-out calculations and field stake-out.
- The contractor is responsible for maintaining the drainage pattern as shown on these plans and maintaining positive drainage away from all buildings and also a minimum slope on all grass areas.
- Any proposed signs shall conform to the requirements of the local municipal zoning ordinance.
- Contractor to test fit all existing utilities prior to construction. FSA makes no guarantee that the existing utilities are exactly as shown.
- Contractor shall verify to their satisfaction, the final earthwork numbers prior to commencement of site work. FSA makes no guarantee that on site soils will be suitable for structural fill, or that the earthwork will balance. Contractor assumes full responsibility for the actual earthwork numbers encountered during construction.
- All dimensions in areas of proposed curbing are face of curb to face of curb unless otherwise noted.
- In the case of discrepancy between the scaled and the figured dimensions shown on these plans, the figured dimension shall govern.
- Failure to specifically identify 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 is solely responsible for the construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The contractor shall adjust all existing utility appurtenances as necessary to match proposed grades, unless otherwise noted.
- Curb and pavement shall be installed in a manner as to ensure positive drainage in all areas.
- Field dimensions shall be made as necessary to provide smooth transition both horizontally and vertically from the existing to proposed paving sections.
- All unsuitable material within structural fill areas must be removed and replaced with suitable material to a depth as directed by the geotechnical engineer and/or the municipality.
- Where it is necessary to connect to or extend existing paving, saw cut the existing edge of pavement and mill and overlay at the point of tie-in to ensure a smooth transition and positive drainage.
- If retaining walls are proposed in this plan, they're shown for illustrative purposes only. The final shape, height, footing, material selection, and design of these walls is the responsibility of the (Developer and/or contractor).
- All handicapped ramps, sidewalks and handicapped parking spaces must meet all applicable ADA requirements. The contractor shall verify ADA compliance prior to placement of paving or concrete.
- All items which are referenced and not specifically detailed shall be selected by the owner or owner's representative.

EROSION AND SEDIMENT CONTROL NOTES

- The measures required in the approved Erosion and Sediment Control Plan shall apply as if shown on this plan. These measures shall be completed and in service prior to the commencement of any site work or construction according to the sequence of construction outlined on the approved Erosion and Sediment Control Plans.

ADDITIONAL SITE DATA

EXISTING USE	Office
PROPOSED USE	Multifamily dwellings
SITE ADDRESS	2101 Orchard Road
PROPERTY ID	13-23-0549-138
PROPOSED BUILDINGS	1 Apartment Building, Community Center
PROPOSED DWELLING UNITS	PHASE 1 = 12 units (2 - 1 bedroom units, 10 - 2 bedroom units) PHASE 2 = 12 units (2 - 1 bedroom units, 10 - 2 bedroom units)
EXISTING IMPERVIOUS COVERAGE	0.90 ac. (46%)
PROPOSED IMPERVIOUS COVERAGE	1.03 ac. (53%)
LAND DISTURBANCE AREA	0.91 ac.
WATER SERVICE	Public connection, PA American Water
SEWER SERVICE	Public connection, Lower Allen Township Municipal Authority

GENERAL NOTES

- Any damage to adjoining public roads, utilities, etc. during construction will be repaired in kind by the contractor to Lower Allen Township specifications.
- No subsurface investigation has been performed by Frederick, Seibert and Associates, Inc. to determine ground water, rock, sinkholes or any other natural or man-made existing features.
- FSA, Inc. assumes no liability for the location of any above ground and below ground utilities. Existing utilities are shown from the best available information. Contractor to field verify location and depth of all above and below ground utilities prior to construction. Contractor to contact PA One Call System Inc. at (800) 242-1776
- The contractor shall locate existing utilities in advance of construction operations in the vicinity of proposed utilities. Utility easements are offered for dedication to their respective Authority upon approval and acceptance of said respective authority.
- No trees, shrubs, fences, buildings, or improvements are permitted within the 100' clear sight triangle at any street intersection, existing or proposed.
- No trees, shrubs, fences, buildings, or improvements are permitted within any easements, existing or proposed, as shown on this plan
- The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense. Contractor to use caution in areas where low hanging wires exist.
- All utilities shall be cleared by a minimum of 1'-0". All utility poles shall be cleared by a minimum of 2'-0" or tunneled if required.
- The Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these drawings:

PA One Call System
Lower Allen Township
Cumberland County Conservation District
Cumberland County Planning Department

(800) 242-1776
(717) 975-7575
(717) 240-7812
(717) 240-5362
- The contractor shall be responsible for coordination of his construction with the construction of other contractors.
- The contractor shall notify the Architect/Engineer, before construction, of any conflicts between the plans and actual field conditions.
- The contractor shall protect all utilities and culvert pipes during construction by insuring proper cover, increasing cover, or constructing roadway and parking through base course before loading site with heavy vehicles.
- Job site safety is the sole responsibility of the contractor. The Contractor shall perform all excavation in accordance with O.S.H.A. Regulations for trench safety.
- The contractor shall be aware that in the event of discrepancy between scaled and figured dimensions shown on the plan, the figured dimensions shall govern.
- It shall be distinctly understood that failure to mention specifically any work which would naturally be required to complete the project shall not relieve the contractor of his responsibility to complete such work.
- Load bearing fills (Class 1) proposed for support of buildings, walls, and other structures whose function thereof would be especially impaired by the settlement shall be compacted at optimum moisture content to a 95% density.
- Load bearing fills (Class 2) proposed for support of roadways, pavement, and structures which would not be especially impaired by moderate settlement shall be compacted at optimum moisture content to a 90% density.
- All fills shall be placed in approximately horizontal layers with each layer having a loose thickness of not more than eight (8) inches for class 1 and twelve (12) inches for class 2.

LAND DEVELOPMENT NOTES

- The site has been visited by an experienced professional and there are no signs of watercourses, wetlands, or marches in the proposed area of construction.
- This site does not lie within a designated 100 year floodplain according to FEMA FIRM panel 42041C0281E.
- No sinkholes were observed on-site. If any are discovered during construction, they should be repaired based on geotechnical recommendations.
- There are no stream buffers or wetlands observed on-site by FSA.
- The development shall be constructed in accordance with this plan and all applicable ordinances.
- Upon completion of the stormwater management improvements and prior to final inspections of improvements, the developer shall submit a plan labeled "as-built plan," showing the actual location, dimension and elevation of all stormwater management improvements.
- Field surveys were performed by Frederick, Seibert and Associates in March 2022, and all bearings shown hereon are in the state plane coordinate system, PA South Zone, North American Datum of 1983 (NAD83).
- Topographic information shown hereon is derived from field surveys performed by Frederick Seibert and Associates in March 2022, and is on the North American Vertical Datum of 1988 (NAVD88).
- The site benchmark can be found on sheet C-102 Grading and Utility Plan and is marked as a mag nail in Orchard Road. The elevation of this mag nail is 384.35.
- The applicant and owner acknowledge that certain site improvements depicted on this plan, including but not limited to accessible parking spaces, accessible route to the building and freestanding signs, that require approval under regulations contained in the PA Uniform Construction Code and/or Lower Allen Township zoning code must be installed in accordance with separate permit approvals granted under those regulations.
- A dedication of recreational land or fees paid in-lieu will be addressed based on Lower Allen Township ordinance regulations. See section 192-60.
- According to the Department of Conservation and Natural Resources (DCNR) PNDI receipt for the property, the US Fish and Wildlife Service has provided an avoidance measure that should be taken for construction on this property due to its proximity to the northern long-eared bat spring staging/fall swarming habitat. No tree removal shall occur from May 15 to August 15.

STORMWATER NOTES

- The property owner will enter into an agreement with the municipality for the municipality to conduct the inspections and prepare reports. The owner will be responsible for reimbursing the municipality for the costs involved, such reimbursements are to be specified in the stormwater facilities and the BMP maintenance and monitoring agreement.
- The property owner will be responsible for maintenance of all stormwater management facilities to insure they are kept in design condition.
- Construction of stormwater management and erosion control facilities shall be in accordance with the municipality and County standards and specifications.
- All storm pipes, culverts, manholes, inlets and endwall sections shall be constructed in accordance with local municipality and governing standards.
- The stormwater collection and conveyance system has been designed in accordance with the design standards and specifications in place at the time of plan approvals. FSA assumes no responsibility for changes in specifications that may occur after plan approval that would require alternate materials or installation requirements. The contractor shall verify all current standards and notify the Owner/Developer and FSA of any discrepancies that may exist prior to the start of construction.
- Easement conflicts prohibited. Nothing shall be placed, planted, set or put within the area of any easement that would adversely affect the function of the easement. No person shall place any structure, fill, landscaping or vegetation into a storm water management facility or within a drainage easement which will limit or alter the functions of the facility or easement in any way.
- Where any part of the proposed storm drain system is to be constructed within a fill section, the contractor shall compact all select fill material to 95% of ASTM D-698 (AASHTO T-99) with a moisture content \pm 3% of optimum up to the pipe bedding. Refer to the stormwater management construction specifications for a description of the select fill material.
- (SALDO § 184-29) As-built Notes:
 - The applicant shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM site plan. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the municipality.
 - The as-built submission shall include a certification of completion signed by a qualified professional verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.
 - After receipt of the completion certification by the municipality, the municipality may conduct a final inspection.
- A blanket easement is dedicated to Lower Allen Township for the purpose of inspection of all stormwater management BMPs, including stormwater conveyance structures.
- (SALDO § 184-43) No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, structures, or easements that were installed/approved as a requirement of this chapter without written approval of the municipality.
- (SLDO § 184-32) It is not anticipated that the Township will take long term ownership of the Stormwater management facilities on the site.

ZONING DATA AND SALDO REGULATIONS

ZONING ORDINANCE: LOWER ALLEN TOWNSHIP			
ZONING DISTRICT: R-3 MULTI-FAMILY RESIDENTIAL (GROUNDWATER NON-USE OVERLAY)			
PROPOSED USE: MULTI-FAMILY DWELLINGS			
ARTICLE VII, R-3 MULTI-FAMILY RESIDENTIAL DISTRICT REGULATIONS			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Maximum building height	75 ft.	<40 ft.
2	Maximum permitted density (excluding existing dedicated rights-of-way)	15 units per gross acre	12 units per acre
3	Minimum lot area	None	1.96 ac.
4	Minimum lot width (at existing dedicated right-of-way)	50 ft.	404 ft.
5	Maximum impervious coverage	60%	1.03 ac. (53%)
6	Minimum front yard setback	30 ft.	See front yard regulation table below
7	Minimum side yard setback	15 ft. (for multifamily units)	>15 ft.
8	Minimum rear yard setback	35 ft.	>35 ft.
ARTICLE XIX, SECTION 220-202: BUFFERING REQUIREMENTS			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Minimum buffer yard when multifamily dwellings abut residential uses	25 ft.	>25 ft.
ARTICLE XXIV, OFF-STREET PARKING			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Minimum drive aisle width	24 ft.	24 ft.
2	Minimum parking space size	9 ft. x 16 ft.	9 ft. x 18 ft.
3	Minimum parking area setback from building (from multifamily dwellings or nonresidential buildings)	10 ft.	>10 ft.
4	Minimum parking area setback from lot line	5 ft.	>5 ft.
5	Minimum parking area setback from roadway (public or private streets)	6 ft.	>6 ft.
ARTICLE XX, SECTION 220-212: YARD REGULATIONS			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	When a lot abuts a street less than 50 ft., the front yard depth and width of the side yard abutting the street shall be measured from a line parallel to 25 ft. from the center line of the street	25 ft.	>25 ft.
2	Minimum interior yard separation for principal structures. (Distances are for one story height, distances increase by 5 ft. for each additional story. When adjacent principal structures differ in the number of stories, the required distance between structures shall be calculated based upon the taller of the structures.)	Front to front = 50 ft. Rear to rear = 50 ft. Front to rear = 50 ft. End to end = 25 ft. End to front = 30 ft. End to rear = 30	\geq 10 ft. (existing non-conformity)
3	Where buildings exist in the same block, the setback line of the building to be constructed shall be at least the average of buildings constructed within the same block. In measuring to determine said building line, open porches shall not be construed as part of the building.	SEE FRONT YARD REGULATION TABLE	SEE FRONT YARD REGULATION TABLE
ARTICLE XXVII, SECTION 220-150: ACCESSORY STRUCTURES			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	No accessory structures allowed within a front setback	N/A	N/A
2	Structures accessory to a residential use shall be located within the rear yard or side yard setback of the principal building or structure no less than five feet from any rear or side lot line.	5 ft.	>5 ft.
3	No more than 2 storage/utility sheds are allowed on a residential lot	2 maximum	2
ARTICLE XX, SECTION 220-200: LANDSCAPE REQUIREMENTS			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Front yard landscaping of any nonresidential or multifamily units	At least 5% shall be landscaped	>10%
SALDO - ARTICLE X, SECTION 192: DESIGN STANDARDS AND REQUIRED IMPROVEMENTS			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Minimum driveway separation	From ROW line of adjacent intersecting street = 40 ft. From property lines = 5 ft.	\geq 40 ft. (existing non-conformity)

PARKING REGULATIONS

ZONING ORDINANCE: LOWER ALLEN TOWNSHIP			
ZONING DISTRICT: R-3 MULTI-FAMILY RESIDENTIAL (GROUNDWATER NON-USE OVERLAY)			
PARKING CLASSIFICATION: MULTIFAMILY DWELLINGS			
ARTICLE XXVIII, OFF-STREET PARKING			
ITEM	ZONING REGULATION	REQUIRED	AVAILABLE / PROPOSED
1	Minimum parking spaces for multifamily dwelling classification	Age-restricted = 0.5 per dwelling unit Efficiency/studio = 1 per dwelling unit 1 bedroom = 1 per dwelling unit 2 bedroom = 2 per dwelling unit 3 bedroom = 3 per dwelling unit Visitor parking = 0.2 per dwelling unit Staff parking = 1 per employee on maximum shift	See below
2	ADA parking spaces required for multifamily development	2 spaces for 26 - 50 total site spaces required 3 spaces for 51 - 70 total site spaces required	See below
PARKING CALCULATIONS			
PHASE I - Residential Dwelling Spaces			
2 - 1 bedroom units (2*1 per dwelling unit) = 2 spaces			
10 - 2 bedroom units (10*2 per dwelling unit) = 20 spaces			
Total for dwelling units = 22 spaces			
PHASE II - Residential Dwelling Spaces			
2 - 1 bedroom units (2*1 per dwelling unit) = 2 spaces			
10 - 2 bedroom units (10*2 per dwelling unit) = 20 spaces			
Total for dwelling units = 22 spaces			
Visitor Spaces			
24 dwelling units (24*0.2 per dwelling unit) = 4.8 spaces			
Visitor Total = 5 spaces			
No on-site employees or staff			
Total Parking Spaces Required = 49 spaces			
ADA Parking Spaces Required = 2 spaces			

FRONT YARD REGULATIONS

ARTICLE XX, SECTION 220-212.B: YARD REGULATIONS		
ZONING REGULATION		
Where buildings exist in the same block, the setback line of the building to be constructed shall be at least the average of buildings constructed within the same block. In measuring to determine said building line, open porches shall not be construed as part of the building.		
BELOW ARE THE MEASUREMENTS AND CALCULATIONS FOR A MODIFIED FRONT SETBACK		
	ADDRESS	DISTANCE FROM ORCHARD ROAD RIGHT-OF-WAY
	700 A Lisburn Road	7 ft.
	2101 Orchard Road	10.6 ft.
	2109 Orchard Road	30 ft.*
	2113 Orchard Road	30 ft.*
	2117 Orchard Road	14 ft.
*These distances have been established at 30 ft. because the buildings on these properties conform to the ordinance and meet and exceed the required 30 ft. front setback.		
Required setback based on the average distance above = 18.3 ft.		
Minimum provided front setback distance = 18.8 ft.		

LEGEND

	EXISTING	PROPOSED
SUBJECT BOUNDARY	---	---
BUILDING SETBACK LINE	---	---
RIGHT OF WAY	---	---
EASEMENT LINE	---	---
ADJOINER BOUNDARY	---	---
FENCE (METAL)	X X X X X X X X	X X X X X X X X
FENCE (WOODEN)	□ □ □ □ □ □ □ □	□ □ □ □ □ □ □ □
DITCH (STREAM)	~ ~ ~ ~ ~ ~ ~ ~	~ ~ ~ ~ ~ ~ ~ ~
EDGE OF WATER	---	---
WETLAND	---	---
FLOODPLAIN	---	---
SOIL BOUNDARY	---	---
RAILWAY	---	---
CENTERLINE	---	---
EDGE OF PAVEMENT	---	---
EDGE OF GRAVEL	---	---
CURB	---	---
WALL	---	---
GUARD RAIL	---	---
EDGE OF CONCRETE	---	---
BUILDING	---	---
MAIL BOX	MB	MB
SIGN (ROAD)	---	---
SIGN (SITE)	---	---
TRAFFIC SIGNAL	---	---
TOPOGRAPHIC FEATURES		
CONTOUR (INDEX)	---	---
CONTOUR (INTERMEDIATE)	---	---
SPOTS ELEVATION	---	---
VEGETATION AREAS		
TREELINE	---	---
DECIDUOUS TREES	---	---
EVERGREEN TREES	---	---
SANITARY SEWER		
GRAVITY LINE	SS	SS
FORCE MAIN LINE	FM	FM
LATERAL	---	---
MANHOLE	SS	SS
CLEANOUT	---	---
VALVE	---	---
WATER		
COLD WATER LINE	W	W
HOT WATER LINE	HW	HW
MANHOLE	HW	HW
FIRE HYDRANT	---	---
VALVE	---	---
METER	---	---
WELL	---	---
STORM DRAINAGE		
STORM SEWER LINE	---	---
ROOF DRAIN LINE	---	---
MANHOLE	---	---
INLETS	---	---
CLEANOUT	---	---
UTILITIES		
GAS LINE	G	G
ELECTRICAL LINE	UGE	UGE
FIBER OPTIC LINE	FO	FO
COMMUNICATION LINE	COMM	COMM
OVERHEAD LINES	OH	OH
MANHOLE	---	---
PEDS, BOX, & ETC	---	---
POLE	---	---
LIGHT POLE	---	---
GAS METER	---	---
GAS VALVE	---	---

LEGEND - ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	OC	ON CENTER
ADS	ADVANCED DRAINAGE SYSTEM	PC	POINT OF CURVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL	PCC	POINT OF COMPOUND CURVE
AWWA	AMERICAN WATER WORKS ASSOCIATION	PGL	PROPOSED GRADE LINE
BLDG	BUILDING	PRC	POINT OF REVERSE CURVE
BOT	BOTTOM	PT	POINT OF TANGENT
CIP	CAST IRON PIPE	PVC	POINT OF VERTICAL CURVE
CL	CENTERLINE	PVI	POINT OF VERTICAL INTERSECTION
CO	CORRUGATED METAL PIPE	PVT	POINT OF VERTICAL TANGENT
CMP	SANITARY SEWER CLEAN-OUT	ROW	RIGHT-OF-WAY
COMM	COMMUNICATION	SAN	SANITARY
CONC	CONCRETE	SCE	STABILIZED CONSTRUCTION ENTRANCE
DA	DRAINAGE AREA	SDR	STANDARD DIMENSION RATIO
DIA	DIAMETER	SIP	SET IRON PIN
EGL	EXISTING GRADE LINE	SDMH	STORM DRAIN MANHOLE
EX	EXISTING	SF	SQUARE FEET
EIP	EXISTING IRON PIN	SS	SANITARY SEWER
FFE	FINISH FLOOR ELEVATION	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	STA	STATION
HGL	HYDRAULIC GRADE LINE	STD	STANDARD
HDPE	HIGH DENSITY POLYETHYLENE	SY	SQUARE YARDS
INV	INVERT	TAN	TYPE AS NOTED
L	LINEAR FEET	TEMP	TEMPORARY
MAX	MAXIMUM	TS	TOP OF STRUCTURE
MB	MAIL BOX	TG	TOP OF GRATE
MIN	MINIMUM	TR	TOP OF RIM
MJ	MECHANICAL JOINT	TYP	TYPICAL
NO	NUMBER	UP	UTILITY POLE
NIC	NOT IN CONTRACT	VIF	VERIFY IN FIELD
NTS	NOT TO SCALE	WL	WATERLINE
OAC	OR APPROVED EQUAL	WM	WATER METER
		WV	WATER VALVE

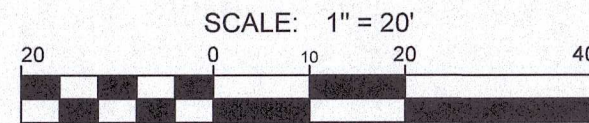
SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION
OF CARLELE ROAD AND ORCHARD ROAD
LOWER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA
Broad Investments, LLC c/o Mike Weisner
10 Keary Court, Mechanicsburg, PA 17055
717.446.4141

PROJECT NO.	2022-0012
DWNN BY	DATE
CMH	6-29-2023
PROJECT MANAGER	JTD
EMAIL	jdoty@fsa-inc.com
PROPERTY ID #	13-23-0549-138
SCALE	
NTS	
SHEET TITLE	

NOTES & LEGENDS

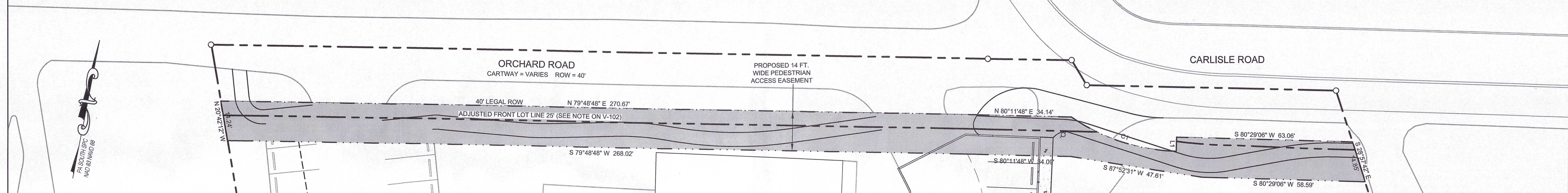
C-002
SHEET 02 OF 13



PROJECT NO.	
2022-0012	
OWN BY	DATE
CMH	6-29-2023
PROJECT MANAGER: JTD	
EMAIL: jdoty@isa-inc.com	
PROPERTY ID #	
13-23-0549-138	
SCALE	
1" = 20'	
SHEET TITLE	

V-101
SHEET 03 OF 13

LINE	BEARING	DISTANCE	CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
L1	N 09°30'54" W	5.00'	C1	70.00'	40.00'	39.46'	S 83°08'34" E	32°44'40"

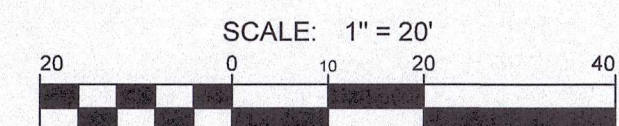


Site plan for a proposed apartment building at the intersection of Orchard Road and Carlisle Road. The plan shows the building footprint, parking areas, sidewalks, and various engineering notes. Key features include:

- Proposed Apartment Building:** 8,050 sq. ft., 2 stories, 12 units. (See architectural plans for details).
- Parking:** 14 9'x18' parking spaces, 12 12'x18' parking spaces, and 8 ADA parking spaces & signage.
- Sidewalks:** Concrete sidewalks along Orchard Road and Carlisle Road, and a ramp for the proposed building.
- Landscaping:** Grass lawn, concrete curbs, and various plantings.
- Engineering Notes:** Sight distance requirements, buffer yard regulations, and various survey points.
- Surrounding Properties:** 1-story dwellings, a clubhouse building, and a stone & frame building.
- Infrastructure:** Utility poles, street lights, and a water main.
- Access:** Access drive for Verizon structure and a hand truck ramp.
- Other Features:** Dumpster screening and enclosure, outdoor seating area, and a gravel pavement area.

ARTICLE XX, SECTION 220-212.B: YARD REGULATIONS		
ZONING REGULATION		
Where buildings exist in the same block, the setback line of the building to be constructed shall be at least the average of buildings constructed within the same block. In measuring to determine said building line, open porches shall not be construed as part of the building.		
BELOW ARE THE MEASUREMENTS AND CALCULATIONS FOR A MODIFIED FRONT SETBACK		
	ADDRESS	DISTANCE FROM ORCHARD ROAD RIGHT-OF-WAY
	700 A Lisburn Road	7 ft.
	2101 Orchard Road	10.5 ft.
	2109 Orchard Road	30 ft.*
	2113 Orchard Road	30 ft.*
	2117 Orchard Road	14 ft.
<p><i>*These distances have been established at 30 ft. because the buildings on these properties conform to the ordinance and meet and exceed the required 30 ft. front setback.</i></p> <p>Required setback based on the average distance above = 18.3 ft.</p> <p>Minimum provided front setback distance = 18.6 ft.</p>		

1. The modified setback of 18.3 feet shown above is in reference to the relief provided under the Lower Allen Township Zoning Ordinance Section 220-212B(1).
2. See the "Front Yard Regulations" table on sheet C-002 Notes and Legends for the calculations and breakdown for this modified front setback.
3. All site traffic signs to be installed according to municipality standards. Contractor to coordinate with client on final layout and design of signage.
4. All site signage shall meet the requirements of Lower Allen Township sign ordinance Article XXV.



Bane II Investments, LLC c/o Mike Weidner
10 Kasey Court, Mechanicsburg, PA 17055

MARK:	DESCRIPTION:	DATE:
-------	--------------	-------

SAFE

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 fsa-inc.com

128 SOUTH POTOMAC STREET
HAGERSTOWN, MD 21740
301 701 3850

20 WEST BALTIMORE STREET
GREENCASTLE, PA 17225
717 527 1007

516 SOUTH HANOVER STREET
CARLISLE, PA 17013
717 701 8111

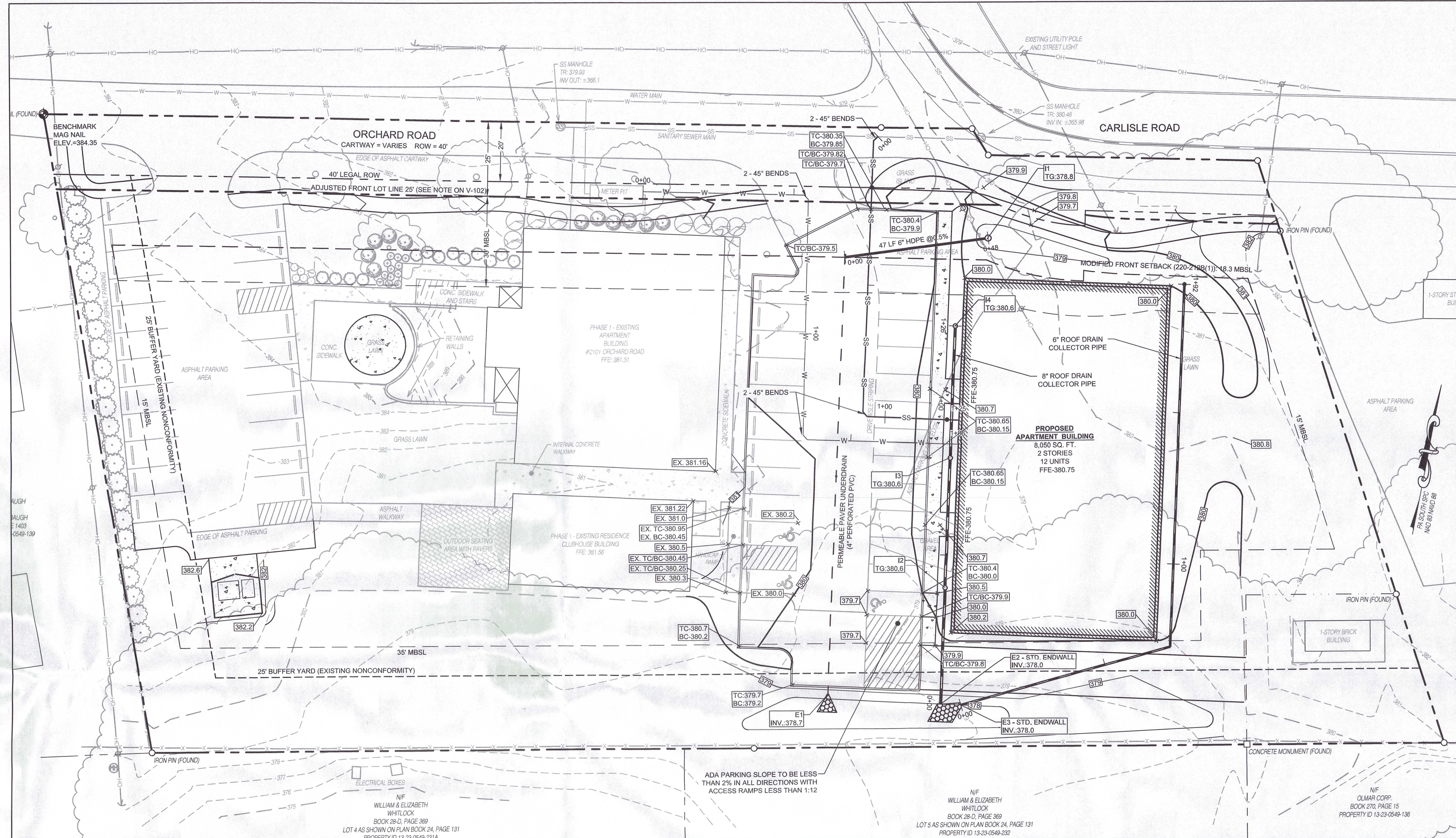
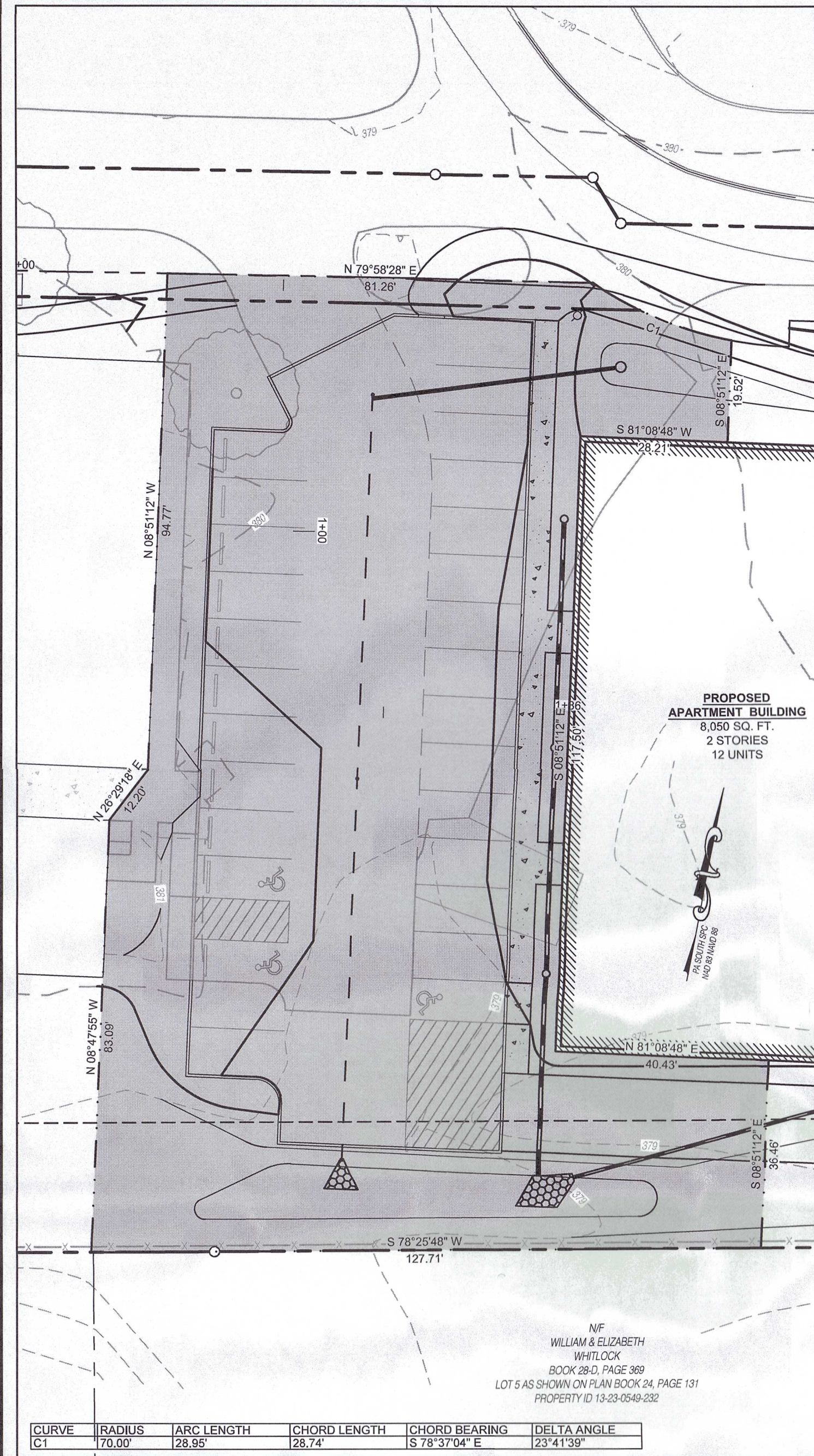
15 EAST MAIN STREET
NEW BLOOMFIELD, PA 17088
717 276 2571

PROJECT NO.		2022-0012	
DRAWN BY CMH		DATE 6-29-2023	
PROJECT MANAGER: JTD			
EMAIL: jdoty@tsa-inc.com			
PROPERTY ID # 13-23-0549-138			
SCALE 1" = 20'			
SHEET TITLE			

LAYOUT & DIMENSION PLAN

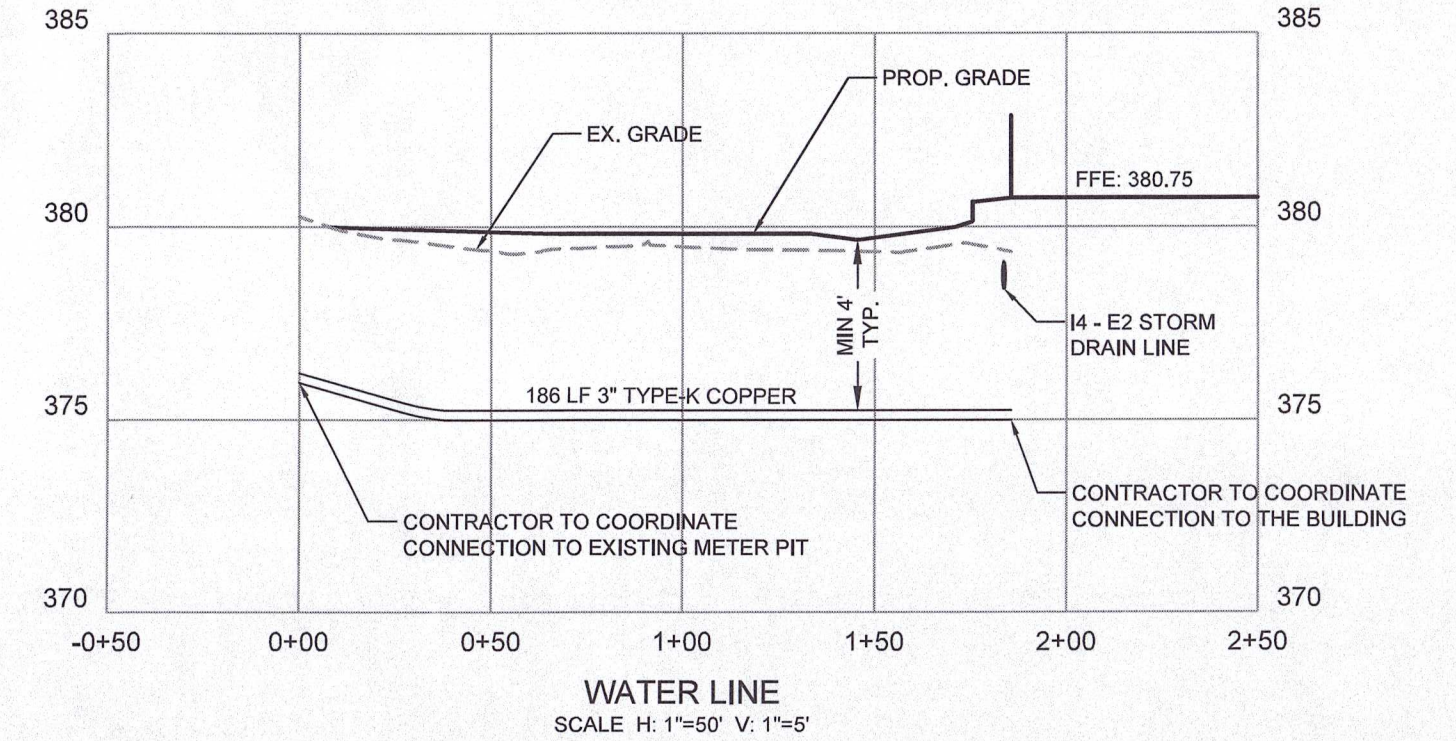
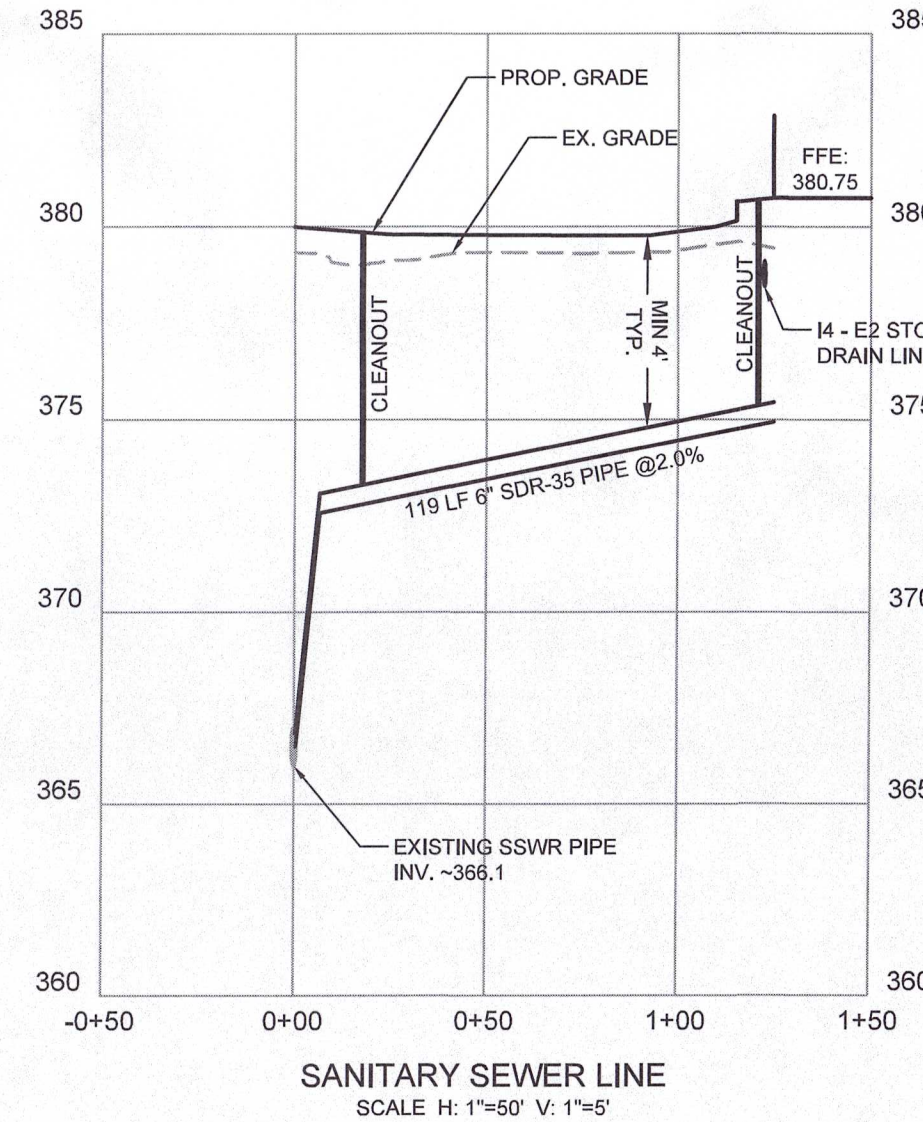
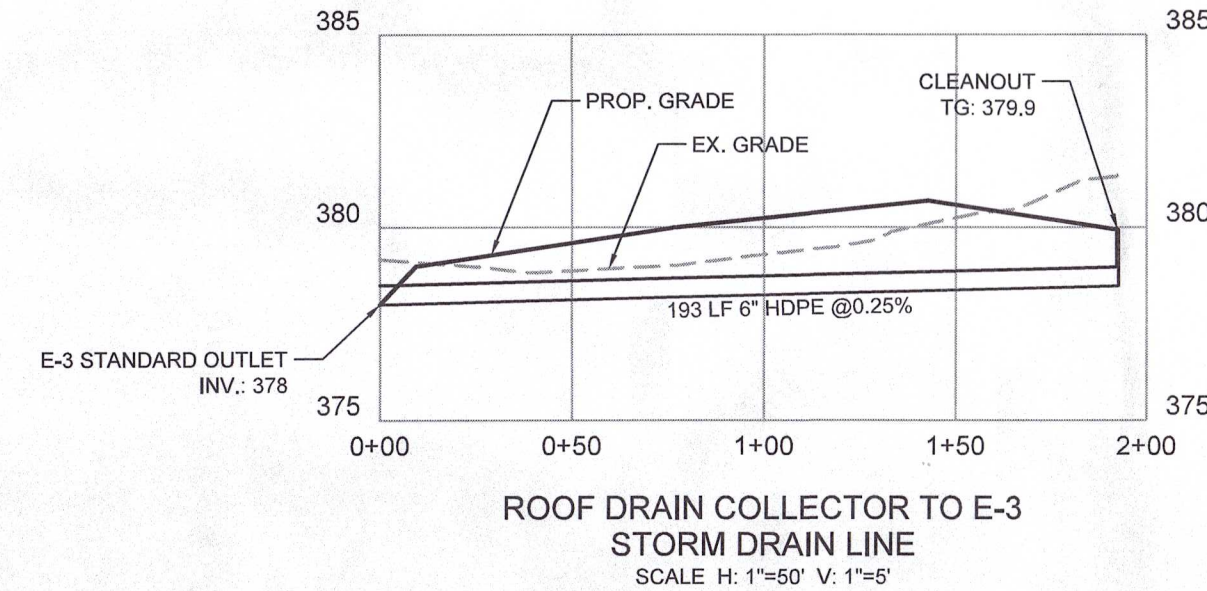
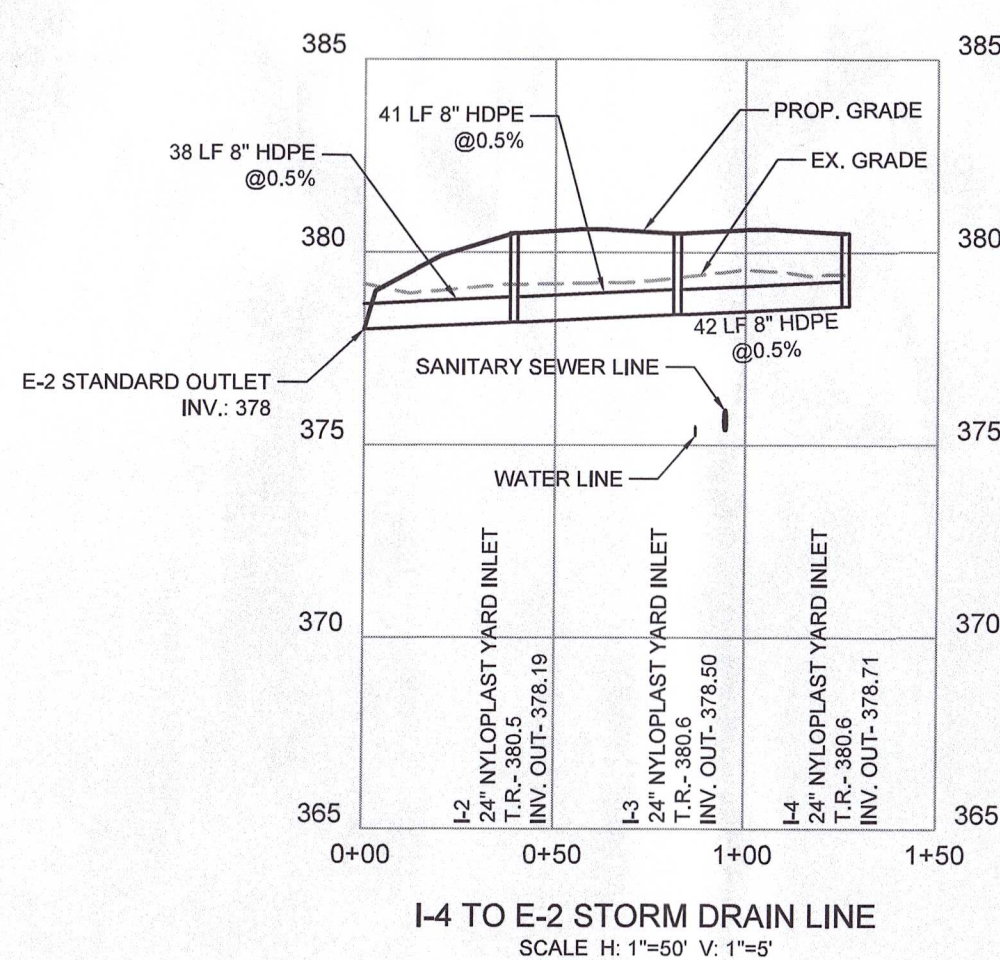
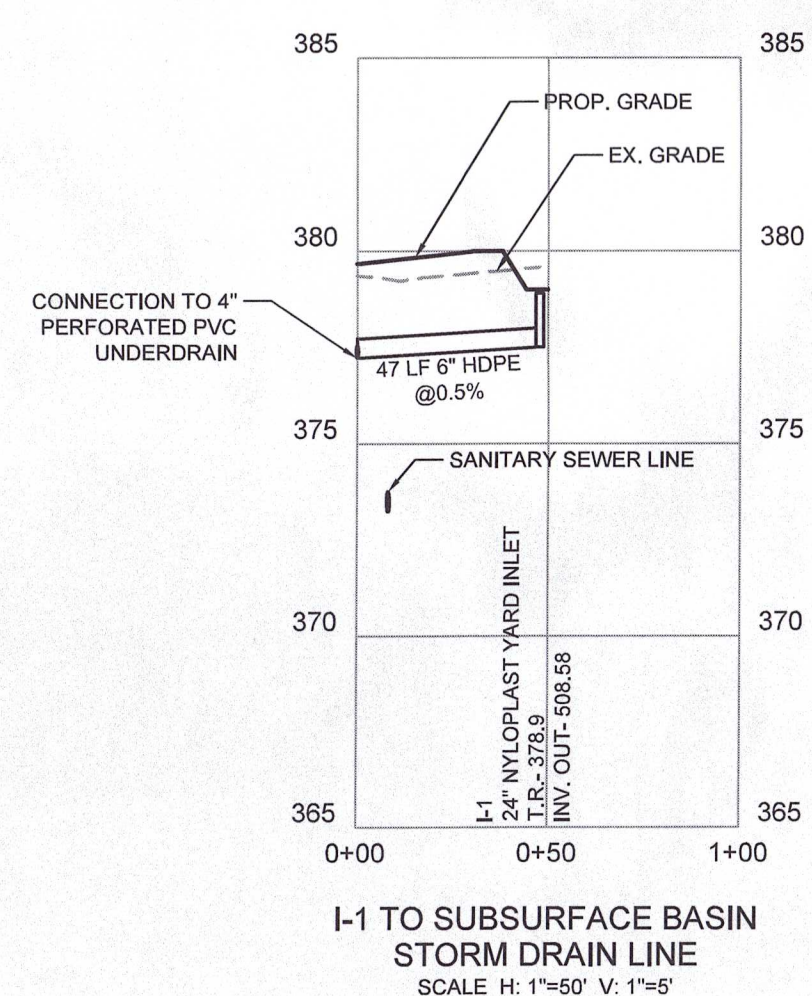
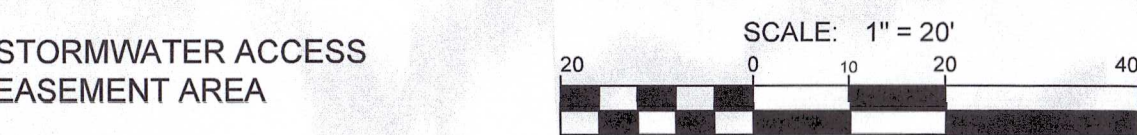
C-101
SHEET 05 OF 13

GRADING AND UTILITY PLAN



NOTES:

1. All sewer lateral work is to be completed per the specifications of Lower Allen Township Authority.
2. The connection to the LATA sewer in Orchard Road is to be cut-in only, no saddles are allowed.



SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION
OF CARLISLE ROAD AND ORCHARD ROAD

LOWER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

Bane II Investments c/o Mike Weidner

10 Kasey Court, Mechanicsburg, PA 17053
717.446.4141

PROJECT NO.	
2022-0012	
DWN BY CMH	DATE 6-29-2023
PROJECT MANAGER: JTD	
EMAIL: jdoty@tsa-inc.com	
PROPERTY ID # 13-23-0549-138	
SCALE	
AS SHOWN	

GRADING & UTILITY PLAN

C-102
SHEET 06 OF 13

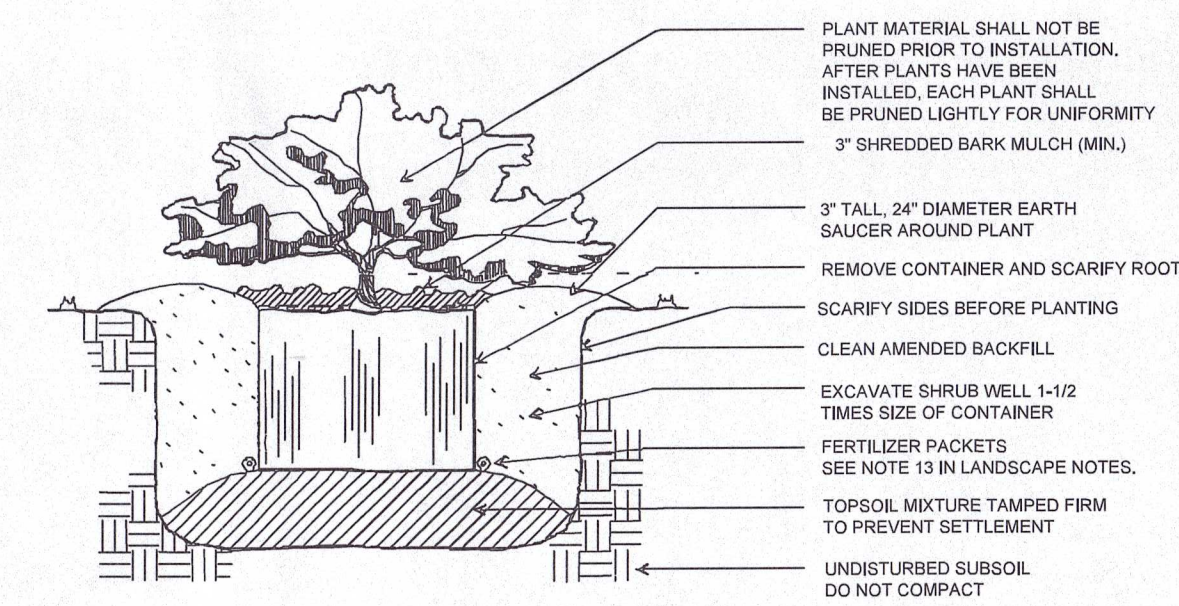
FSA

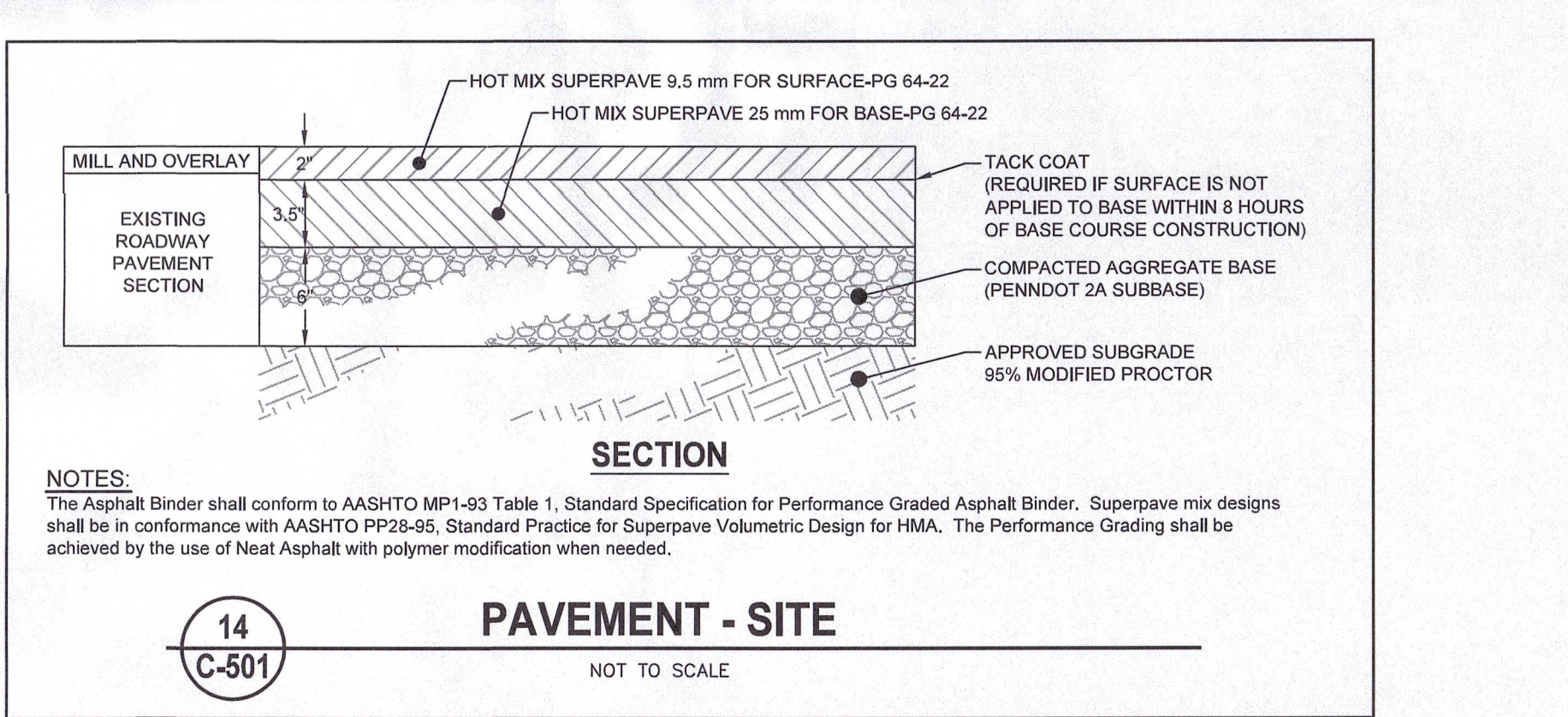
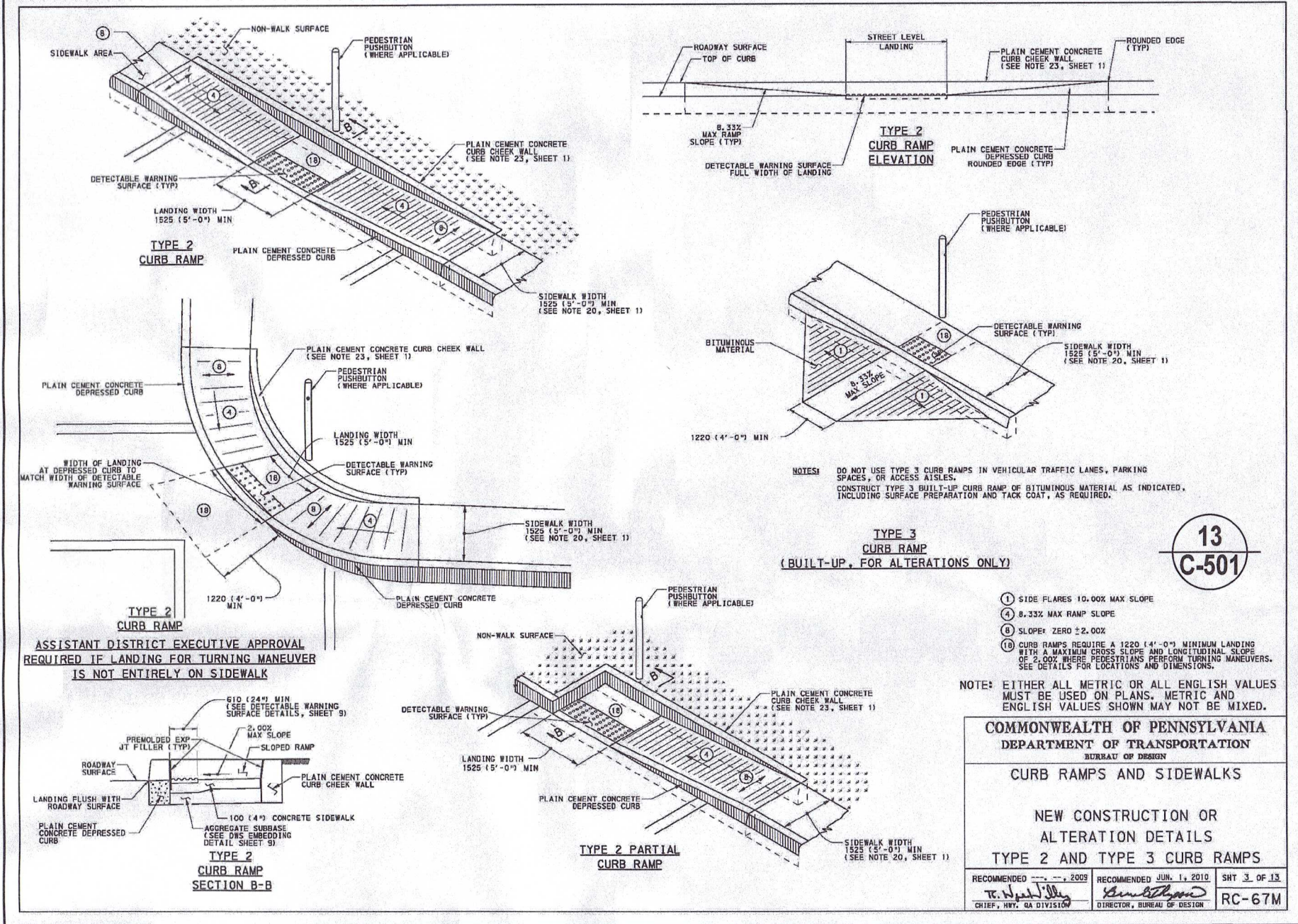
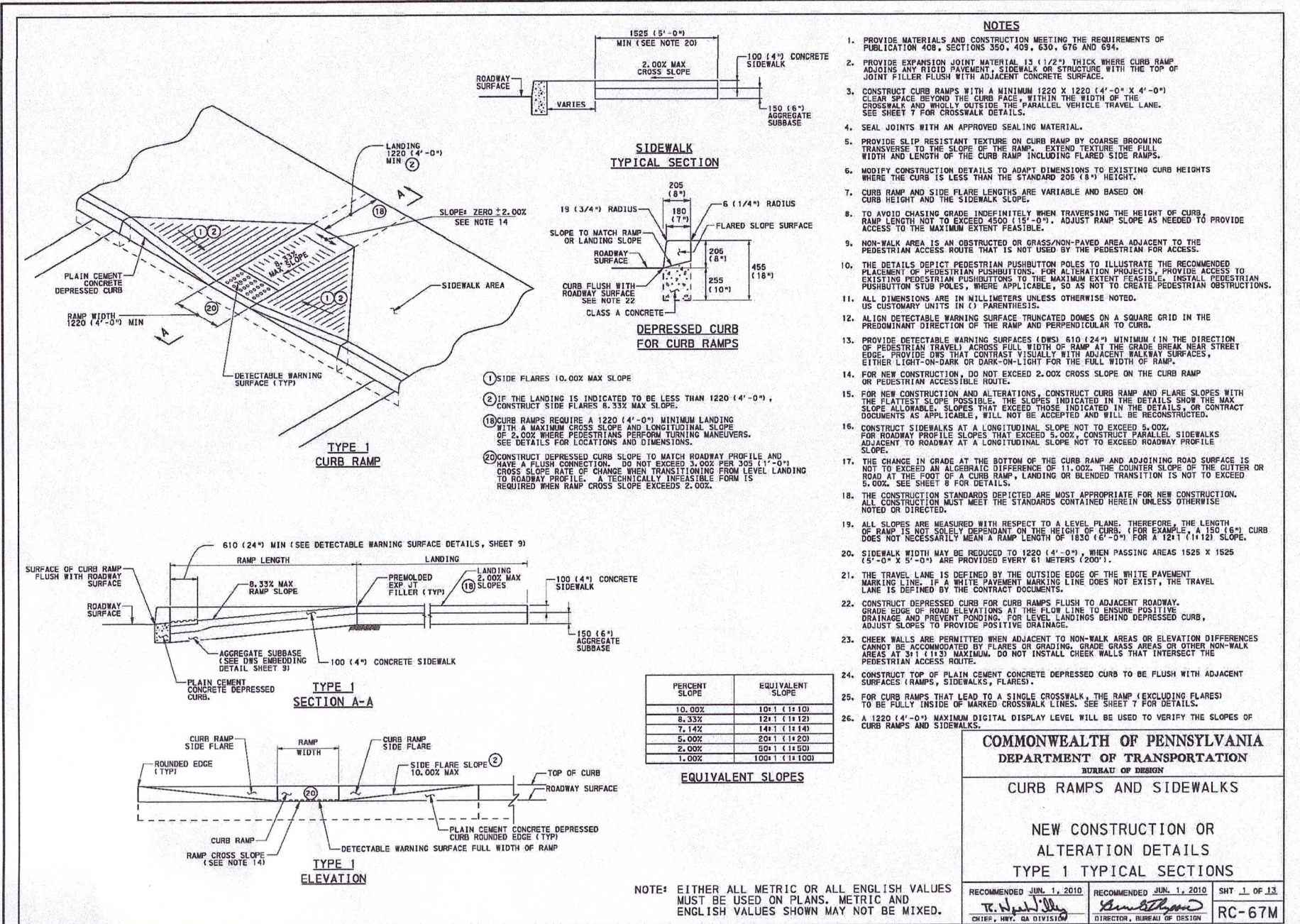
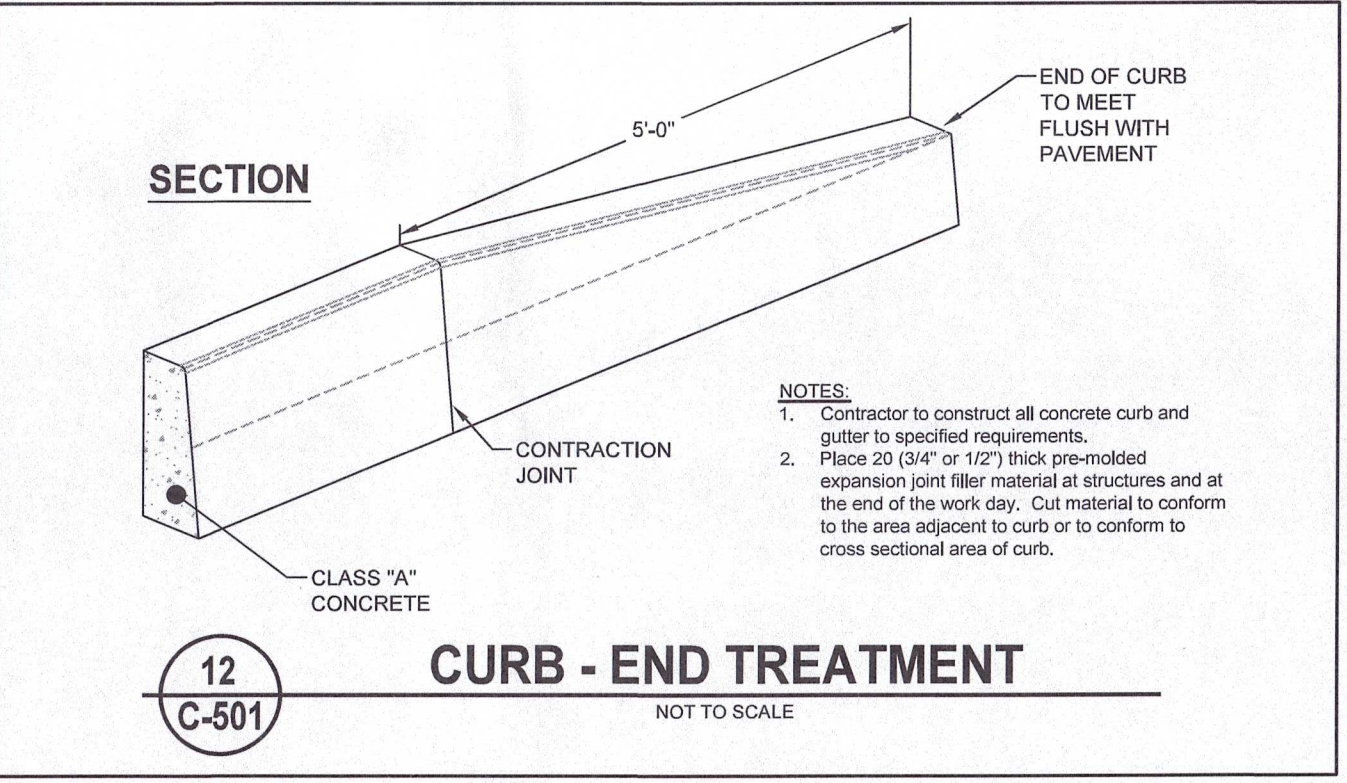
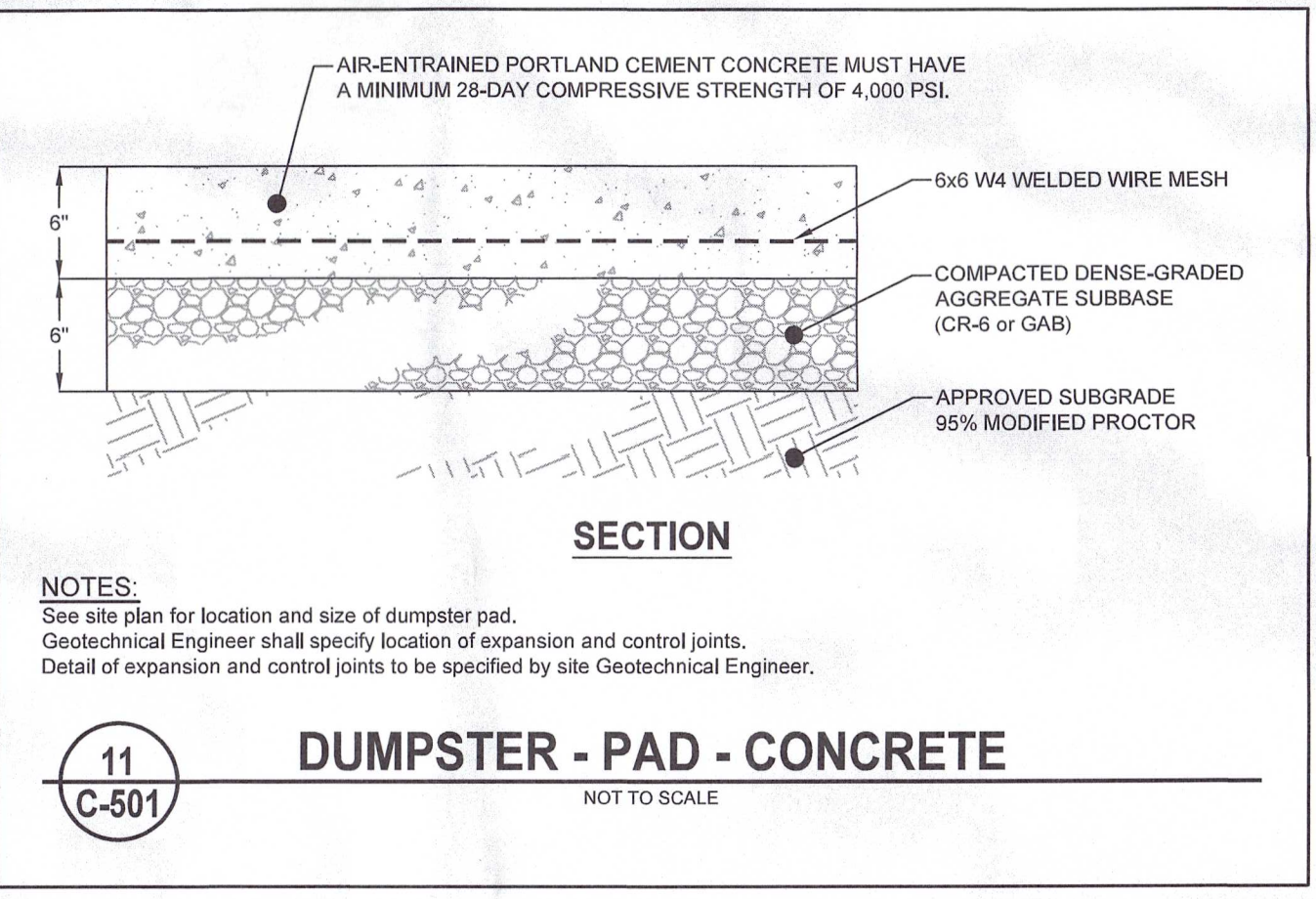
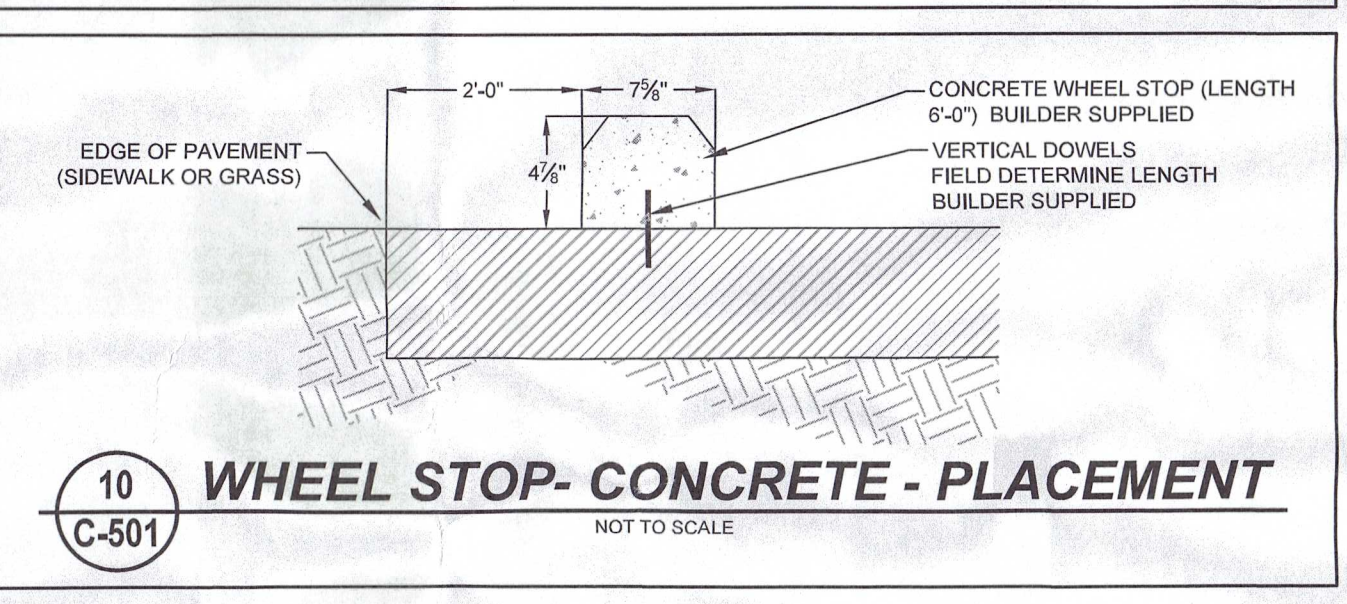
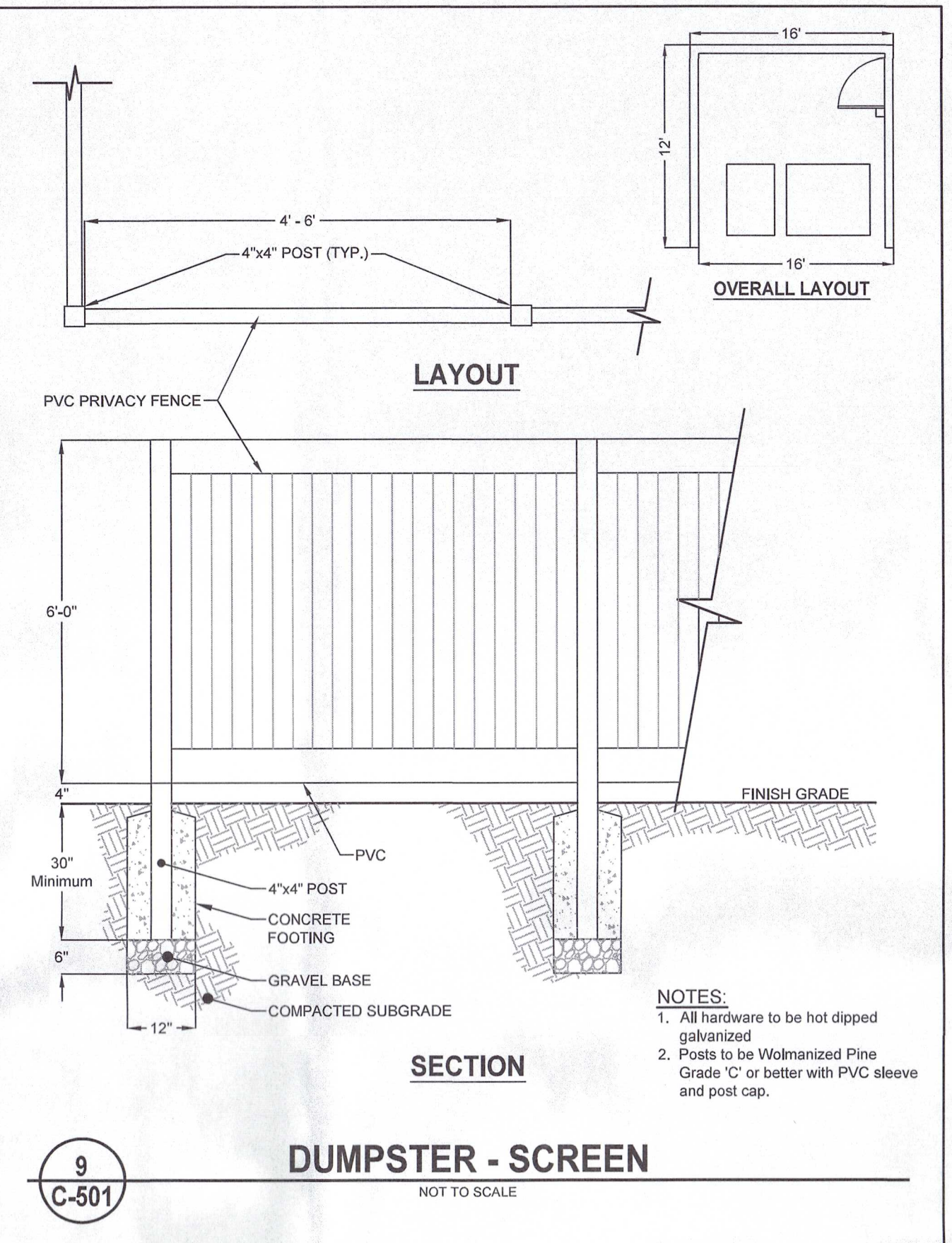
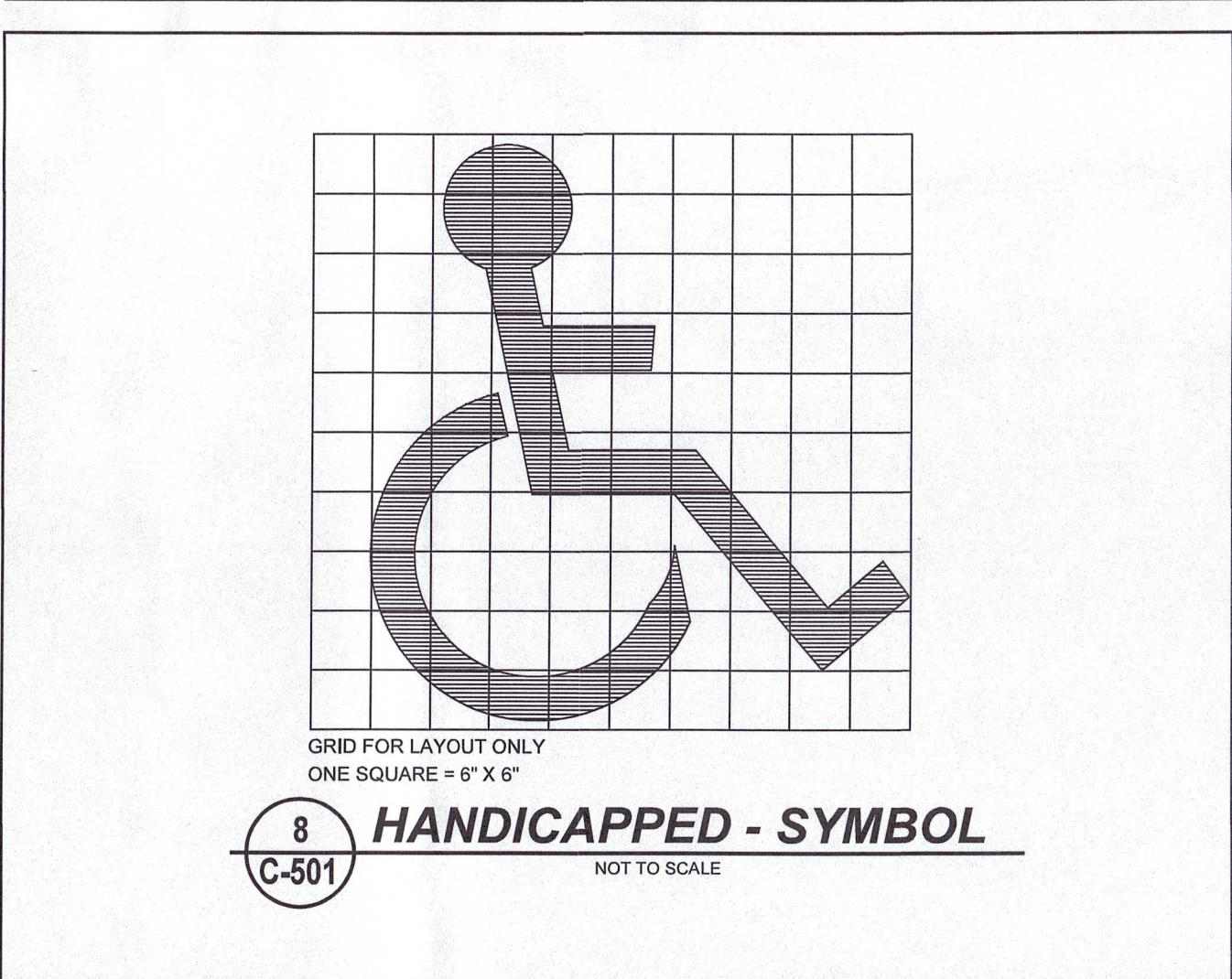
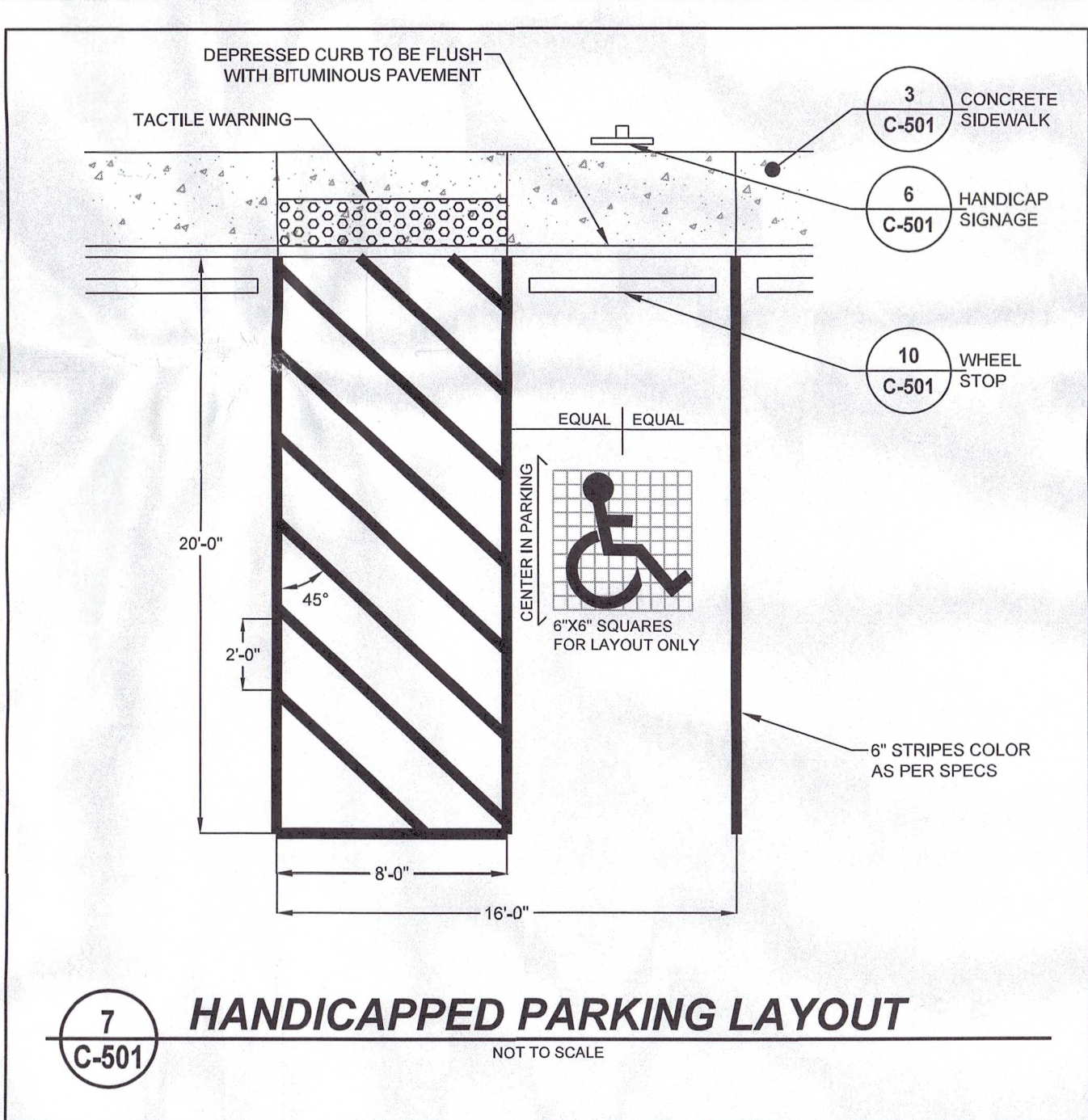
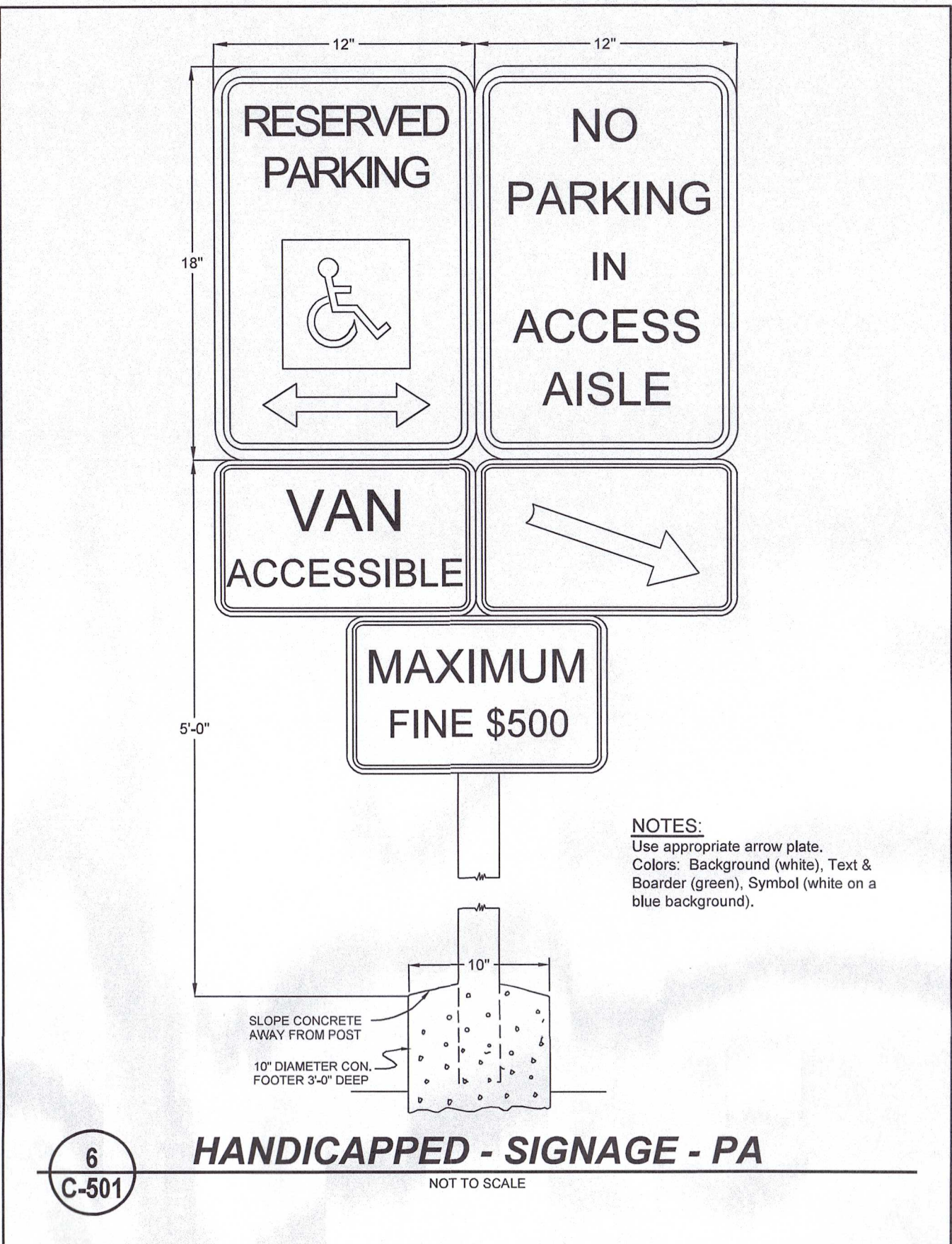
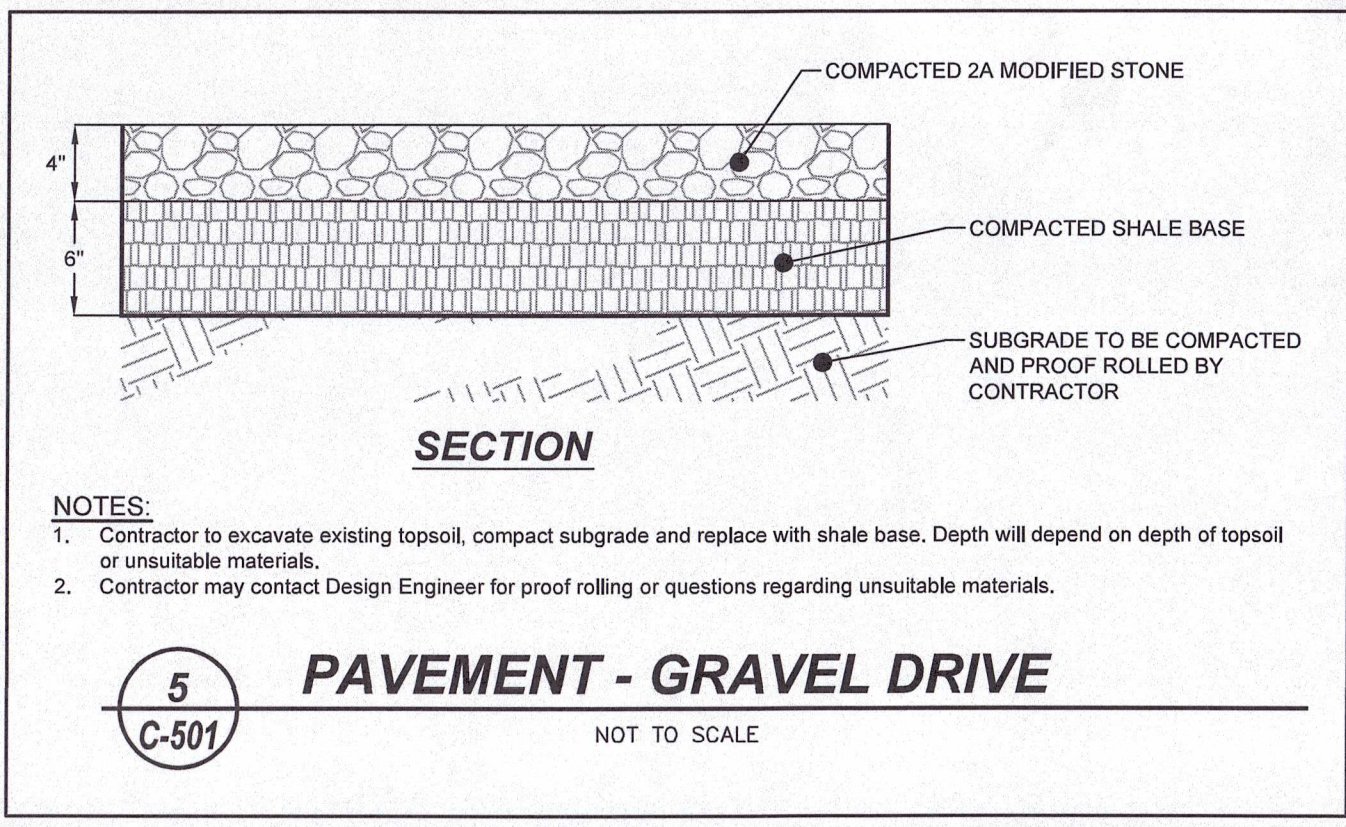
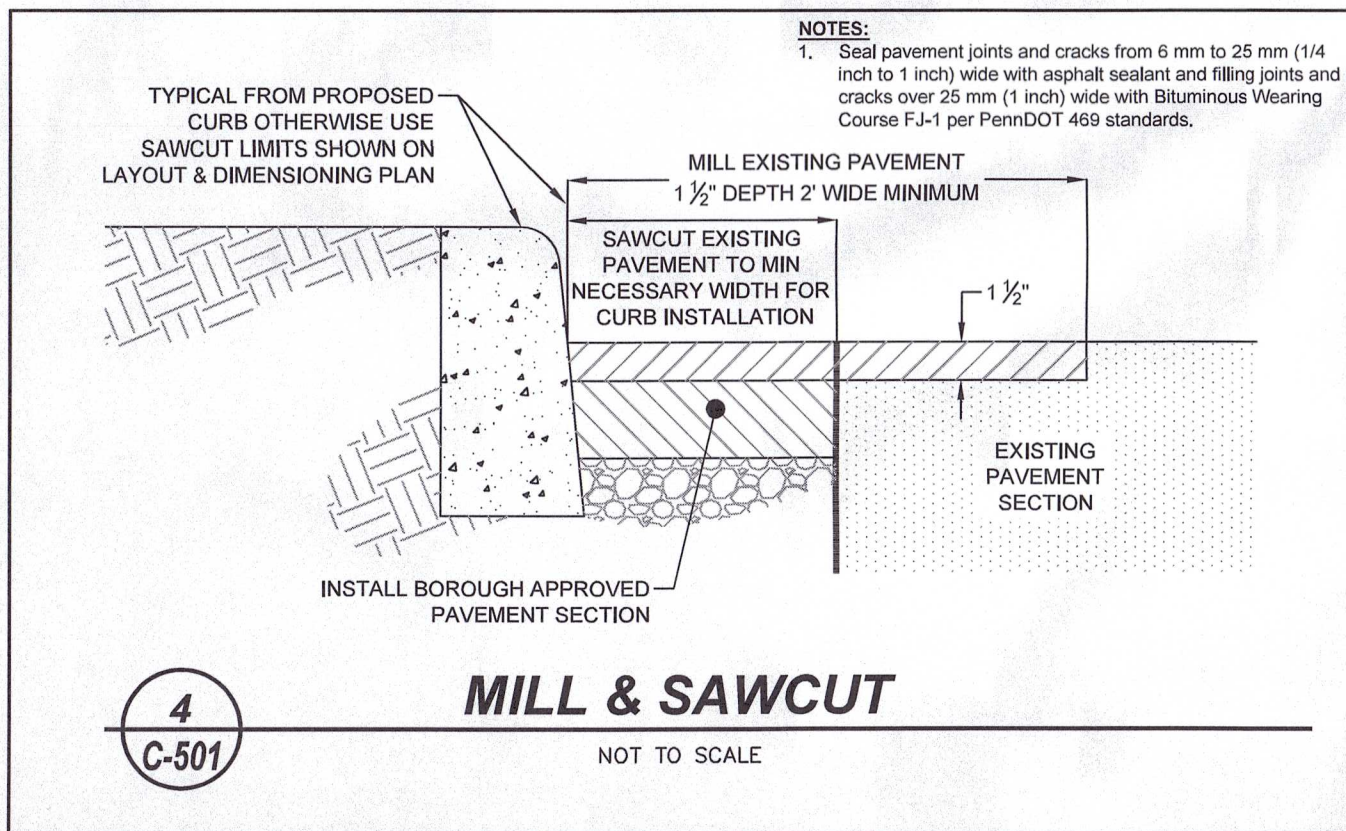
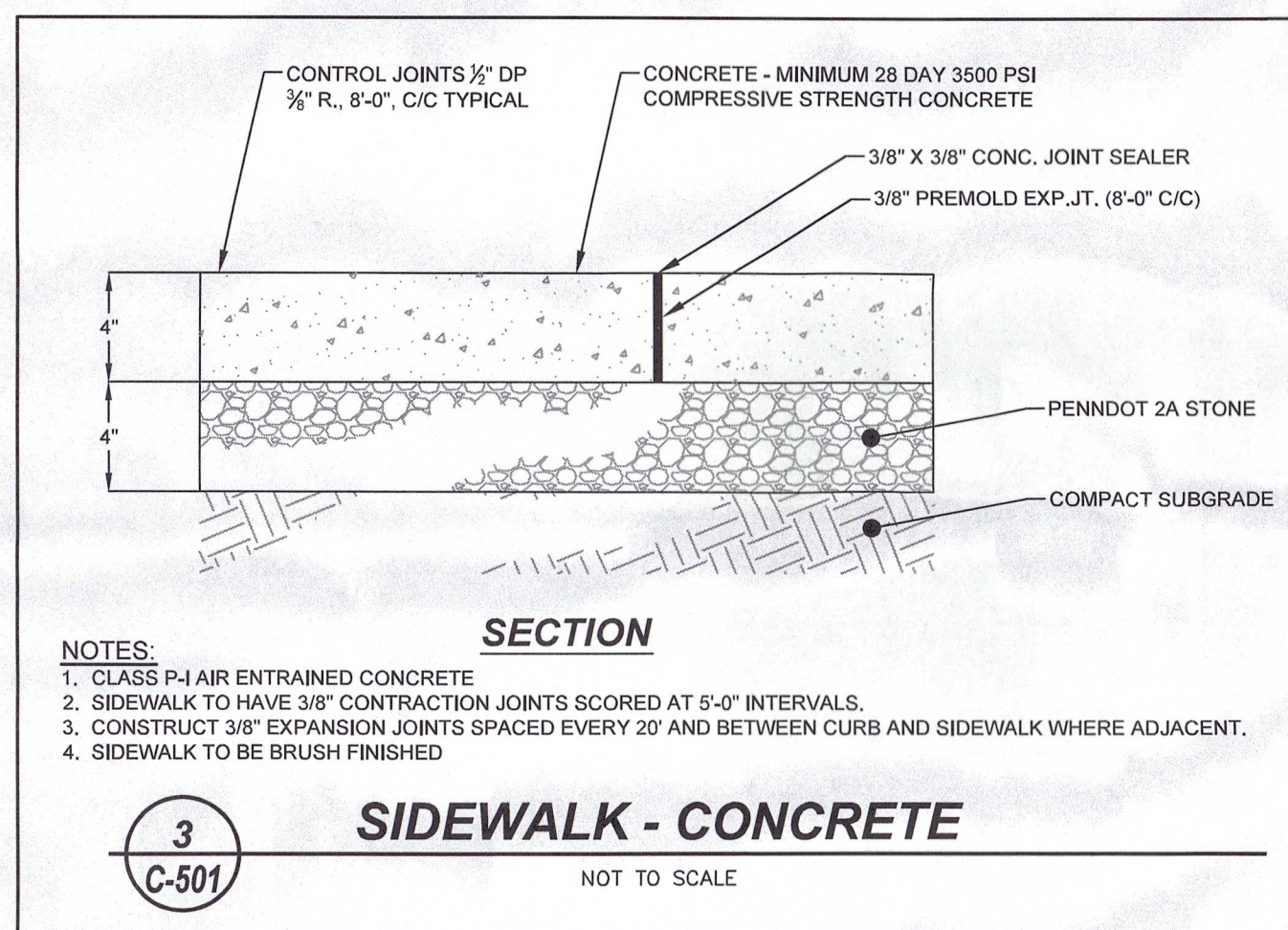
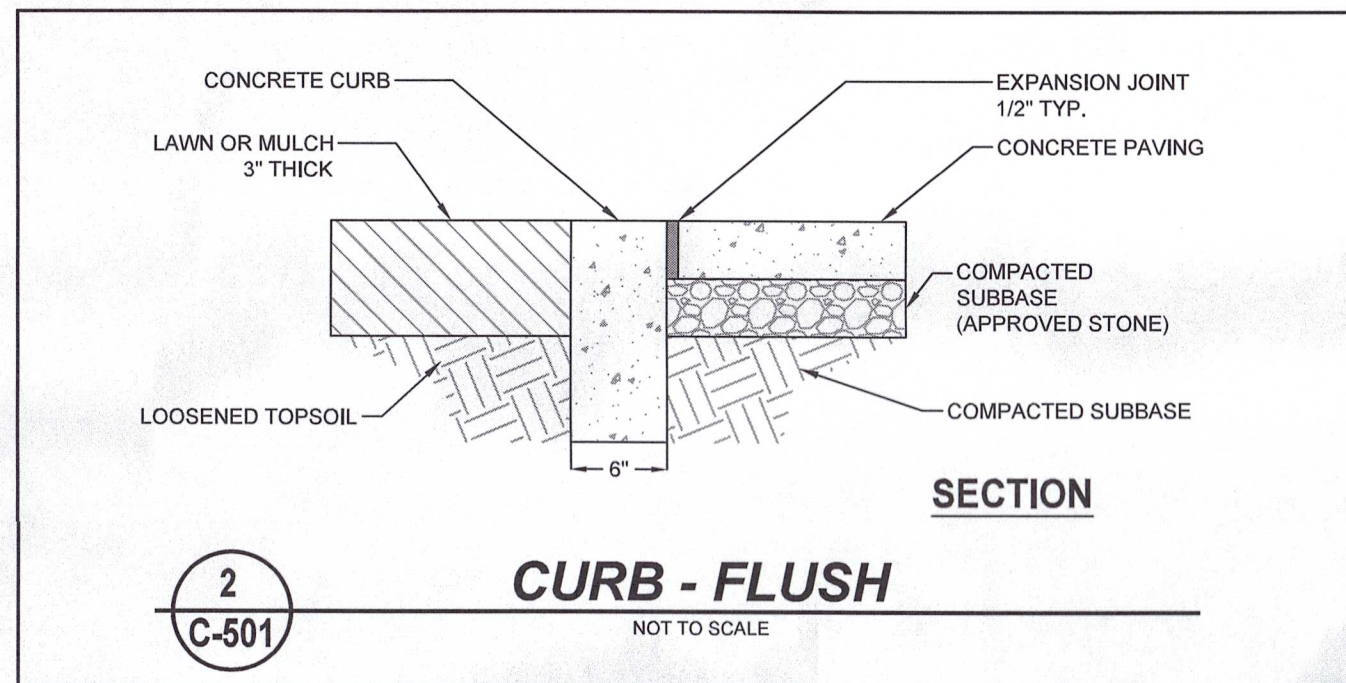
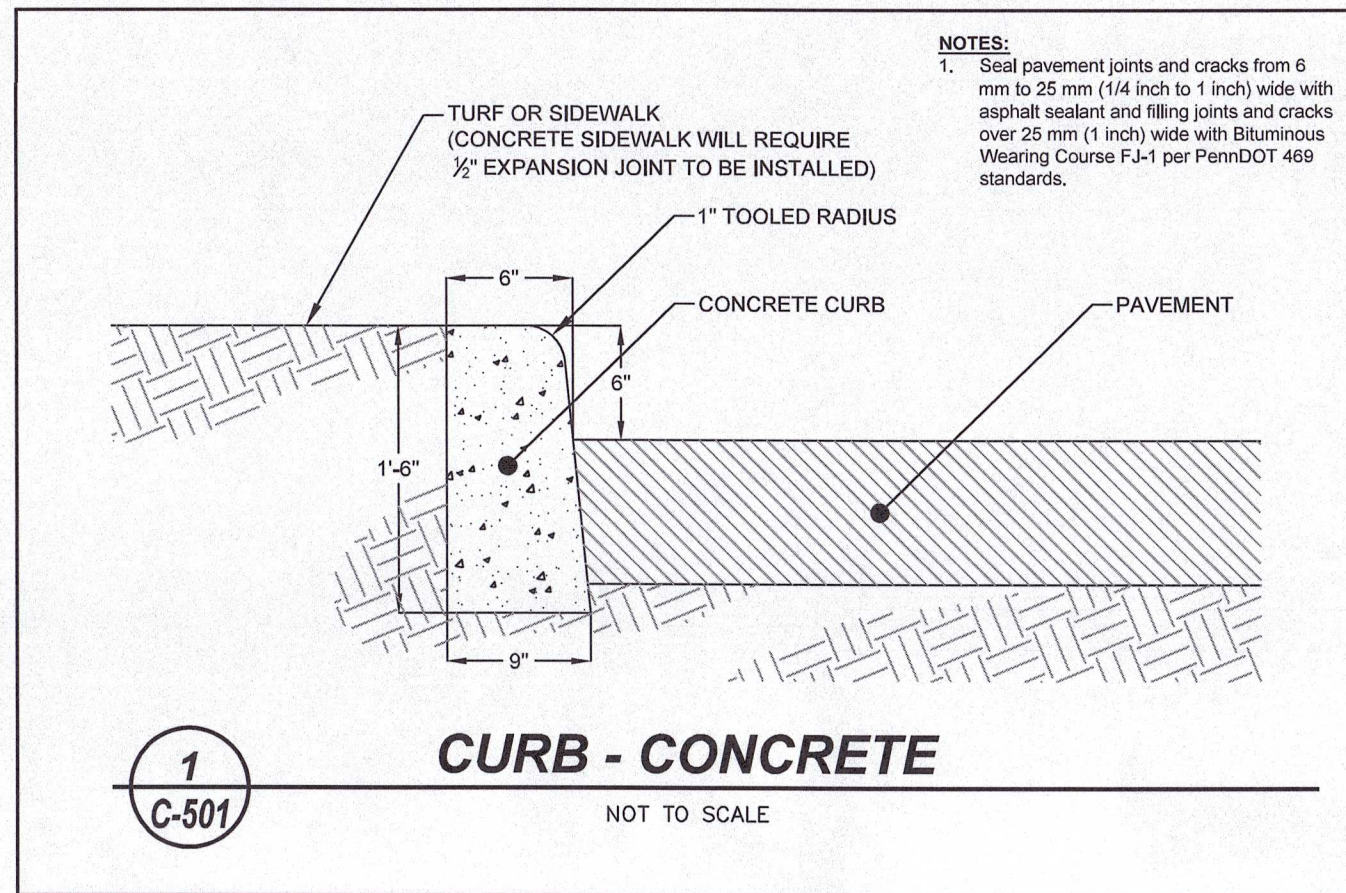
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128 SOUTH OTTAWA STREET ANN ARBOR MI 48106	20 WEST BALTIMORE STREET ANN ARBOR MI 48106	18 EAGLE MAIN STREET ANN ARBOR MI 48106
301 3RD AVE 717.791.1650	717.791.1607	717.791.2531

MARK	DESCRIPTION	DATE
	Revised per Lower Allen Township Authority Comments	12-14-22





SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION OF CARLISLE ROAD AND ORCHARD ROAD

LOWER ALLEN TOWNSHIP, PENNSYLVANIA

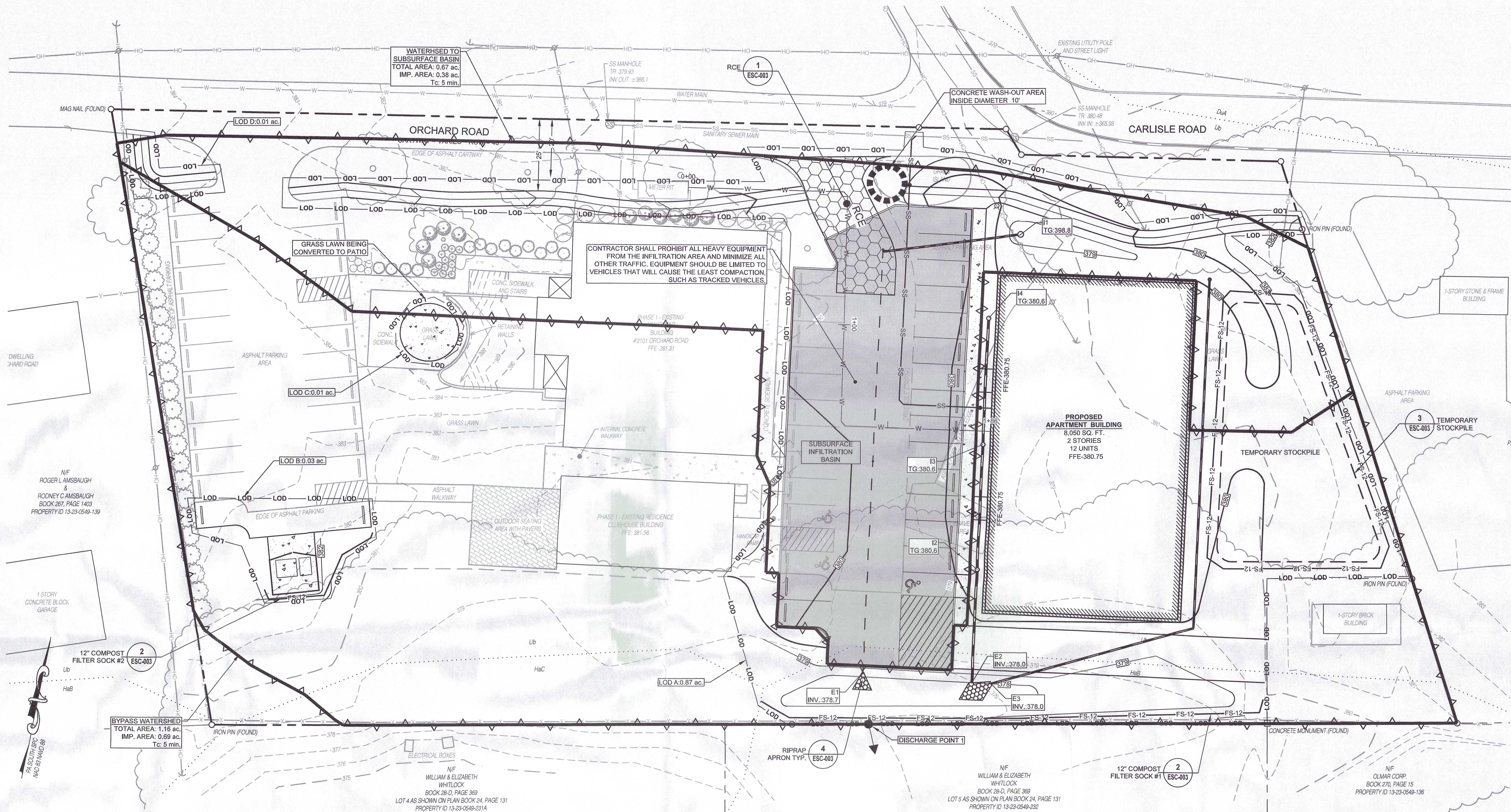
CUMBERLAND COUNTY, PENNSYLVANIA

Beni Investments, LLC c/o Mike Weidner
10 Casey Court, Leesport, PA 17225
717.468.4444

PROJECT NO. 2022-0336
DATE 6-29-2023
PROJECT MANAGER JTD
EMAIL jtd@fse-inc.com
PROPERTY ID # 13-23-0549-138
SCALE 1" = 20'
SHEET TITLE

C-501

SHEET 08 OF 13



SEQUENCE OF CONSTRUCTION

A copy of the erosion and sediment control narrative shall be provided to the contractor. Contractor is to familiarize him/herself with the erosion and sediment control narrative and plans prior to construction.

Contractor shall contact Cumberland County Conservation District (717-240-7812), Lower Allen Township (717-975-7575) and Frederick, Seibert and Associates (717-701-8111) at least seven (7) days prior to the start of construction to schedule a preconstruction meeting.

Contractor to notify the PA One Call System (1-800-242-1776) for the location of existing underground utilities at least three (3) days prior to starting any earth disturbance activities.

All earth disturbance activities shall proceed in accordance with the following sequence. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas. All embankment slopes shall be tracked prior to stabilization. As soon as slopes, channels, ditches and other disturbed areas reach final grade they must be stabilized. This site is in a special protection watershed, upon completion or temporary cessation of earth disturbance activity that portion of the site must be immediately stabilized. As disturbed areas within a project approach final grade, preparations should be made for seeding and mulching to begin. In no case should an area exceeding 15,000 square feet, which is to be stabilized by vegetation, reach final grade without being seeded and mulched.

NOTE: The following sequence is written with the assumption that construction has commenced on the Master Subdivision for Smith Farm Partners. The road and the infiltration basin have been installed and the proper ESC BMP's will be installed to prevent erosion into the infiltration basin and the tracking mud onto the road.

- Field identify/stake the limits of disturbance and proposed ESC/PCSM BMPs.
- Install rock construction entrance.
- Install all perimeter filter barriers (compost filter socks #1 & #2).
- Strip topsoil within the limits of disturbance, stockpile, place filter barrier around the low side of the stockpile and stabilize.
- Rough grade site.
- Trench and install sanitary sewer and water lines where shown.
- Build building pad up to grade.
- Remove existing asphalt parking lot and begin constructing subsurface infiltration basin.
- Install roof drains and connect to the infiltration basin.
- When basin is completed to grade, install concrete curb, sub-base, and permeable pavers respectively to bring parking lot to final grade.
- Install riprap downstream of subsurface infiltration basin underdrain.
- Complete fine grading of site and construct entrance improvements.
- Stabilize any remaining disturbed areas.
- Spread topsoil at a depth of 6", stabilize with matting, as shown and per the permanent seeding specifications.
- RCE to be removed, grading to occur to finish Vegetated Swales, and remainder of erosion control blanket to be installed.
- Disturbed areas shall be stabilized and any affected BMP's must be repaired immediately. Temporary BMP's may not be removed until a minimum uniform 70% perennial vegetative cover is well-established across the entire upslope contributing drainage area. All areas proposed to be paved must be paved or have a compacted stone base in place.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the Cumberland County Conservation District for a final inspection prior to the removal of any remaining BMP's.

Critical Stages of Implementation/Stormwater Management BMP Construction Observations

A licensed professional or designee shall be present on-site to inspect the critical stages of implementation of the PSCM Plan. The following critical stages of implementation shall be inspected (see Sequence of Construction for proper implementation):

Construction of Subsurface MRC BMP

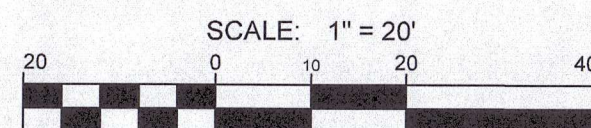
- to ensure basin size and shape
- to ensure subgrade to be uncompacted
- to ensure proper installation of underdrain system, outlet structure, and drain connection

LEGEND

- 18" FS - FILTER SOCK (SIZE NOTED)
- RIP RAP STABILIZATION
- SWALE/SPILLWAY MATTING
- SLOPE MATTING (STEEPER THAN 3:1)
- NPDES
- NPDES BOUNDARY
- LIMIT OF DISTURBANCE
- WATERSHED BOUNDARY
- SWALE WATERSHED BOUNDARY
- ORANGE PROTECTIVE FENCE
- ROCK CONSTRUCTION ENTRANCE
- EXISTING CONTOURS
- EXISTING TEXT
- FINISHED GRADE SPOT ELEVATION
- FINISHED GRADE INTERMEDIATE CONTOUR
- FINISHED GRADE INDEX CONTOUR
- TEMPORARY GRADING
- FILTER BAG INLET PROTECTION
- SOIL BOUNDARY

TOTAL LOD: 0.92 ac.

LOD TABLE	
LOD A	0.87 ac.
LOD B	0.03 ac.
LOD C	0.01 ac.
LOD D	0.01 ac.
TOTAL	0.92 ac.



A copy of the Erosion and Sediment Control Plan/Narrative shall be provided to the contractor. Contractor is to familiarize him/herself with the erosion and sediment control narrative and plans prior to construction.

SPRING LAKE APARTMENTS

SITUATED SOUTH OF THE INTERSECTION
OF CARLISLE ROAD AND ORCHARD ROAD

LOWER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

Barb H Investments, LLC c/o Mike Wadner
10 Leary Court, York, PA 17404-4441

PROJECT NO.	2022-0012
DRAWN BY	DATE
CMH	6-29-2023
PROJECT MANAGER	JTD
EMAIL	jduty@fss-inc.com
PROPERTY ID #	13-23-0549-138
SCALE	1" = 20'
SHEET TITLE	

ESC
PLAN

ESC-001
SHEET 09 OF 13

Professional Certification:
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional under the laws of the State of Pennsylvania. License # 28090313
Expiration Date 05-31-2025

FSA
FREDERICK SEIBERT & ASSOCIATES, INC.
CIVIL ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECTS • LAND PLANNERS
15 EAST MAIN STREET
NEW SCOTLAND, PA 17088
717-251-0300
100 SOUTH POTOMAC STREET
HARRISBURG, PA 17103
717-657-0100
100 SOUTH POTOMAC STREET
HARRISBURG, PA 17103
717-657-0100

A copy of the stamped approved drawings signed and dated by the Cumberland County Conservation District must be available at the project site at all times.

1. The owner shall be responsible for starting any earth disturbance activities (including clearing and grubbing), the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S Plan preparer, the post construction stormwater management plan preparer, and a representative from the Cumberland County Conservation District to an on-site preconstruction meeting.

2. At least 3 days prior to starting any earth disturbance activities, or expediting into an area that is environmentally sensitive, the Pennsylvania One-Call System shall be notified at 1-800-242-1776 for the location of existing underground utilities.

3. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the Cumberland County Conservation District or by DEP prior to implementation.

4. Any clearing, grubbing, or other activity that is required to occur prior to the start of the project shall be completed prior to the start of site clearing, grubbing, and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase has been installed and are functioning as described in this document.

5. All areas to be constructed shall be properly fenced and allowed to enter and exit the construction area. All boundaries shown on the plan drawings. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.

6. Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2H:1V or flatter.

7. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the owner shall immediately notify the Cumberland County Conservation District and the Pennsylvania Department of Environmental Protection and notify the Cumberland County Conservation District and/or the regional office of DEP.

8. All building materials and wastes must be removed from the site and recycled or disposed of in accordance with the Department's Solid and Hazardous Waste Regulations. E&S BMPs to minimize the potential for erosion and sediment pollution and notify the Cumberland County Conservation District must be burned, buried, dumped, or discharged at the site.

9. All off-site waste and borrow areas must have an E&S Plan approved by the Cumberland County Conservation District or DEP fully implemented prior to being activated.

11. The owner shall be responsible for ensuring that any material brought on site is Clean Fill. From FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as Clean Fill due to analytical testing.

12. All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetation.

13. Vehicles and equipment may neither enter directly nor exit directly from Lots onto Public Streets except where shown.

14. When the site is stabilized, all E&S BMPs must be maintained properly. Maintenance must include inspections of all E&S BMPs after each storm event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, or removal of E&S BMPs, must be performed immediately, if E&S BMPs fail to perform as expected, regardless of BMP type, or modifications to those installed will be required.

15. A written report showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be submitted to the Cumberland County Conservation District for review and approval.

16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.

17. Sediment tracked onto E&S BMPs shall be disposed of in the manner described on the plan drawings.

18. Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.

19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes.

20. All fills shall be placed in compacted layers not to exceed 9 inches in thickness.

21. Fill materials shall include clean, free flowing, compressible, brash, roots, soil, or other organic or objectionable materials that would interfere with or prevent construction of satisfactory fills.

22. Frozen materials or soft, muddy, or highly compressible materials shall not be incorporated into fills.

23. Fills shall not be placed on saturated or frozen surfaces.

24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.

25. All graded areas shall be permanently stabilized immediately upon reaching the project completion, bedrock and rock.

26. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas.

27. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not to finished grade shall be stabilized immediately in accordance with the plan. Areas not to be stabilized in accordance with the plan shall be stabilized immediately. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications.

28. Permanent stabilization is defined as a minimum uniform, permanent 70% vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movement.

29. E&S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Cumberland County Conservation District or DEP.

30. Upon completion of all earth disturbance activities and stabilization of all disturbed areas, the owner and/or operator shall contact the Cumberland County Conservation District for an inspection prior to removal/conversion of the E&S BMPs.

31. After final site stabilization has been achieved, temporary E&S BMPs must be removed or converted to permanent post construction stabilization measures. Removal of temporary E&S BMPs shall be done in accordance with the plan. Removal of temporary E&S BMPs shall be done immediately after stabilization of the area. Removal of temporary E&S BMPs shall be done only during the germinating season.

32. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Cumberland County Conservation District for an inspection prior to removal/conversion of the E&S BMPs.

33. Failure to correctly install E&S BMPs, failure to prevent sediment/runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation.

1. All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction material/wastes. The channel shall be initially over excavated to allow for the placement of topsoil.
2. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work area in the manner described in this plan until such restoration is complete.
3. Channels having Riprap, Reno Mattress, or Gabion linings must be sufficiently over-excavated so that the design dimensions will be provided after placement of the protective lining.

1. On slopes 3:1 and steeper-where concentrated flow occurs, an erosion control blanket shall be installed. No slope shall be cut steeper than 2:1.
2. The erosion control blanket required for channels, swales, or ditches shall be as shown in the respective channel, swale, or ditch detail.
3. The erosion control blanket required for stabilization of general slopes 3:1 and steeper shall be: North American green s150.
4. North American green s150 is an erosion control blanket product which is adequate to stabilize a 2:1 slope which is up to 50 feet in length. Any disturbed slope 3:1 and steeper which is longer than 50 feet may require a different erosion control blanket product. Should this situation occur, contact the county conservation district for direction.

1. All excavated material must be placed on the high side of trench. Excess material shall be hauled away to a site with an approved Erosion and Sediment Control Plan.
2. All Erosion & Sediment Control measures that are disturbed/damaged shall be repaired the same day.
3. The total length of excavated trench open at any one time should not be greater than the total length of pipeline/utility line that can be placed in the trench and back-filled in one working day.
4. No more than 50 linear feet of open trench should exist when pipeline/utility line installation ceases at the end of the workday.
5. Soil supplements, seed and mulch shall be applied within seven days after the pipeline/utility line is installed.
6. Erosion & Sediment Control devices shall be inspected daily and maintained in working condition.

1. Earthwork operations should be graded to drain from structures at all times. Upon completion of daily earthworks operations, the ground surface should be sealed by thorough rolling to reduce infiltration of precipitation and facilitate runoff.
2. Storm piping and manholes should be installed and sealed to prevent leaks. Storm piping associated with storm drain systems should not be utilized as a temporary sediment control device during construction.
3. During construction, care should be taken to reduce the ponding of surface water in and/or adjacent to the buildings. The foundations should be elevated and sealed to prevent water from entering the building at all times (see item 10 on concrete).
4. Visual observations during all earthwork operations should be carried out to render to order any damaged or previously unexplored or recently collapsed features. Any such feature should be called to ECC's attention for remedial action and permanent repair.
5. Storm piping should be designed to prevent sloping ground from causing water to back up into the building.
6. Storm piping should be designed such that joints and structure tie-ins remain watertight with allowance for some settling. Leaking storm pipes promote subsurface seepage and can initiate significant soil development in the form of mudflows, with little or no warning, that can be detrimental to the building. All pipe joints should be sealed to prevent the potential for long-term leakage.

2. MONITORING AND REPORTING REQUIREMENTS

a. **Visual Inspections** The permittee and co-permittee must ensure that visual site inspections are conducted weekly, and after each significant environmental incident or event, including erosion and sediment control, to ascertain that the BMPs are operational and effective in preventing pollution to the waters of the Commonwealth. A written report of each inspection shall be kept, and include:

- (1) a summary of site conditions, BMP's, and compliance; and
- (2) the date, time, and the name of the person conducting the inspection.

b. **Noncompliance Reporting** Where BMPs are found to be inoperative or ineffective during an inspection, or any other time, the permittee and co-permittee shall immediately contact the reviewing entity, by phone or personal contact, followed by the submission of a written report within 24 hours of the discovery of the noncompliance. The report shall include the following information:

- (1) Any condition on the project site which may endanger public health, safety, or the environment, or involve incidents which cause or threaten pollution;
- (2) the period of noncompliance, including exact dates and times and/or anticipated time when the activity will return to compliance;
- (3) steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and
- (4) the date or schedule of dates, and identifying remedies for correcting noncompliance conditions.

3. RECORD KEEPING

- a. **Retention of Records** The permittee and co-permittee shall retain records of all monitoring information including copies of all monitoring and inspection reports required by this permit, and records of data used to complete the Notice of Intent for this permit, for a period of three years.
- b. **Reporting of Monitoring Reports** Monitoring results shall be submitted to the reviewing entity upon request.

b. Duty to Provide Information

(1) The permittee or co-permittee shall furnish to the Department, or the local county conservation district when acting as the reviewing entity, within 30 days of the date of request, any information that the Department may require to determine whether cause exists for modifying, suspending, or terminating the permit or coverage approved under this permit, or to determine compliance with this permit.

(2) The permittee or co-permittee shall furnish, upon request, to the Department, or the local county conservation district when acting as the reviewing entity, copies of records required to be kept by this permit.

(3) The permittee or co-permittee shall be required to file to submit any relevant facts or submitted incorrect information in the NOI, PPC Plan, E&S Control Plan, or in any other report to the Department, or the local county conservation district when acting as the reviewing entity, the permittee or co-permittee shall promptly submit or correct such facts or information.

(4) The permittee or co-permittee shall give seven calendar days advance notice to the Department or the local county conservation district when acting as the reviewing entity, of any planned physical alterations or additions to the permit or coverage which could, in any way, substantially affect the quality and/or quantity of stormwater discharged from the activity.

f. Facilities Construction, Operation, and Maintenance

The permittee or co-permittee shall design, construct, implement, and at all times operate and maintain BMPs, including PPC Plans, E&S Control Plans, and any other stormwater pollution prevention and management measures.

g. Adverse Impact

The permittee and co-permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

h. Reduction, Loss, or Failure of the BMPs

Upon reduction, loss, or failure of the BMPs, the permittee and co-permittee shall take immediate action to restore the BMPs or provide an alternative method of treatment.

2. COMPLIANCE RESPONSIBILITIES

violation of the Pennsylvania Clean Streams Law and the federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit or permit renewal.

b. Penalties for Violations of Permit Conditions

The permittee and co-permittee may be subject to criminal and/or civil penalties for violations of the terms and conditions of this general permit under Section 602 and 605 of the Clean Streams Law, 35 P.S. Sections 691.602 and 691.605, and under the Clean Water Act as specified in 40 C.F.R. Sections 122.41 (a)(2) and (3), which are incorporated by reference.

2. **EROSION AND SEDIMENT CONTROL PLANS**
a. Erosion and Sediment Control Plan, must be prepared, developed, and implemented for each activity covered by this permit in accordance with the Department of Environmental and Regulatory Affairs and Department guidelines. Each plan must be submitted to the Department or local county conservation district when acting as the reviewing entity, E&S Control Plans, BMPs, and revisions thereto, which meet the requirements of Chapter 102, are conditions of this permit and incorporated by reference.
b. Erosion and Sediment Control Plans required under this permit are considered reports that shall be available to the public upon request. Section 102 of the Public Access to Information Act requires that all records of the Department, including but not limited to, the owner or operator of a facility with stormwater discharges covered by this permit shall make plans available to the public upon request by the public. Erosion and Sediment Control Plans must be made available at the site of the construction activity at all times.
c. The stipulations of this permit are intended to ensure that the E&S Plan must be followed.

3. **RECYCLING AND DISPOSAL OF BUILDING MATERIALS AND WASTES**
a. The stipulations of this permit are intended to ensure that the E&S Plan must be followed.

wasteful or unsafe building materials shall be buried, dumped, or discharged at the site.

5. PREPAREDNESS, PREVENTION AND CONTINGENCY PLANS

If the potential exists for causing accidental pollution of air, land, or water, or for causing endangerment of public health and safety through accidental release of toxic or flammable or explosive materials, the permittee must develop a Preparedness, Prevention, and Contingency Plan. The PPC Plan shall be developed in accordance with Department regulations. The PPC Plan shall identify areas which may include, but are not limited to, waste management areas, raw material storage areas, temporary and permanent solid storage areas, maintenance areas, and any other areas that may have the potential to cause noncompliance with the terms and conditions of this permit due to the storage, handling, or disposal of any toxic or hazardous substances, such as oil, gasoline, pesticides, herbicides, fertilizers, etc. SAE and/or other personnel shall be trained in the use of the PPC Plan and the PPC Plan shall be maintained on site at all times and shall be made available for review at the Department's or county conservation districts' request.

The Erosion and Sediment Control Plan, shall be prepared, developed and implemented for all spoil and borrow areas, regardless of their location.

8. **PHASED PROJECTS** Prior to the commencement of earth disturbance activities for additional phases or portions of the project, the permittee or co-permittee shall submit an Erosion and Sediment Control Plan for each additional phase or portion of the project for review and authorization by the reviewing entity. Coverage under this permit is only granted for those phases or portions of a project for which an Erosion and Sediment Control Plan has been submitted to and authorized by the reviewing entity.

10. **WETLAND PROTECTION** If hydric soils are present, a wetland determination must be conducted in accordance with Department procedures. All wetlands identified must be included on the E&S Control Plan.

1. As disturbed areas within a project approach final grade, preparations should be made for seeding and mulching to begin. Topsoil should be dispersed at a depth of 6". In case should an area exceeding 15,000 square feet, which is to be stabilized by vegetation, reach final grade without being seeded and mulched.
2. Temporary seeding (temporary stabilization)
Seed: annual ryegrass 40 lbs/acre
Fertilizer: 10-10-10 @ 500 lbs/acre
Which straw 3 tons/acre (straw and hay mulch should be anchored immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil. This method is limited to slopes no steeper than 3:1. The machinery should be operated on the contour. Note: crimping of hay or straw by running over it with tracked machinery is not recommended.
Lime: one ton/acre
- All diversions, channels, sediment traps and stockpiles shall be stabilized immediately. Any disturbed area on which activity has ceased and which will remain exposed shall be stabilized immediately. During non-germinating periods, mulch shall be applied at the recommended rates. Disturbed areas which are not at finished grade and which will be redistributed or restabilized in accordance with the recommended temporary seeding specifications. Disturbed areas which are either at finished grade or will not be redistributed within 1 year shall be stabilized in accordance with the permanent seeding specifications.

3. **Permanent seeding (permanent stabilization)**
 - Nurse crop: annual ryegrass 10 lbs/acre (pls)
 - Seed (mix 2): kentucky bluegrass 25 lbs/acre, plus redtop 3 lbs/acre or perennial ryegrass 15 lbs/acre (pls)
 - Critical areas (mix 3): birdfoot trefoil 6 lbs/acre, plus tall fescue 30 lbs/acre (pls)
 - Line: six ton/acre
 - Fertilizer: soil tests are recommended. In the absence of a soil test apply at the rate of 10-10-20 @ 1000 lbs/acre
 - Mulch: straw 3 tons/acre
 - Asphalt: saw or equivalent 150 gal/acre
4. **Seed dates**
 - March 15th - may 15th
 - August 15th - October 15th

All areas shall be permanently seeded and mulched within one (1) week of reaching final grade, if in seeding season, otherwise temporary seeding requirements shall be met. All areas seeded with a temporary mixture will receive a permanent seed mixture during the first growing season following seeding. Areas with permanent areas with permanent areas shall be stabilized using crown vetch, as per the requirements of standard and specifications for critical areas stabilization (with ground covers, vines, shrub, and trees).

Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Straw	3 Tons	140 lb.	1,240 lb.	Either wheel or cut straw, free of weeds, not chipped or finely broken
Hay	3 Tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Cellulose	1,500 lb.	35 lb.	310 lb.	Do not use alone in winter, during hot and dry weather or on steep slopes (>:1)
Wood	1,000 lb. Cellulose	25 lb.	210 lb.	When used over straw or hay
Wood Chips	4-6 Tons	185-275 lb.	1,650-2,500 lb.	May prevent germination of grasses and broadleaves

Straw and hay mulch should be anchored immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil. This method is limited to slopes no steeper than 3:1. The machinery should be operated on the contour. (Note: crimping of hay or straw by running over it with tracked machinery is not recommended.)

Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations may be used to tack mulch.

Synthetic binders, or chemical binders, may be used as recommended by the manufacture to anchor mulch provided sufficient documentation is provided to show they are non-toxic to native plant and animal species.

Graded areas should be scarified or otherwise loosened to a depth of 3 to 5 inches to permit bonding of the topsoil to the surface areas and to provide a roughened surface to prevent topsoil from sliding down slope.

Topsoil should be uniformly distributed across the disturbed area to a depth of 4 to 8 inches minimum (2 inches on fill outslopes). Spreading should be done in such a manner that sodding or seeding can proceed with a minimum of additional preparation of tillage. Irregularities in the surface resulting from topsoil placement should be corrected in order to prevent formation of depressions unless such depressions are part of the post construction stormwater management plan.

Topsoil should not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

The PA DEP Erosion and Sediment Pollution Control Program Manual - soil use limitations indicates the existing soils are rated poor for topsoil. It is recommended the existing topsoil be tested for suitability by a qualified soil-testing agency. If testing indicates the existing topsoil is unsuitable for establishing lawns, suitable topsoil shall be hauled to the site or the existing topsoil shall be amended per recommendations by the soil-testing agency.

Any fill material required for the site or excess material to be wasted from the site is required to be hauled from or to, as applicable, a site with an approved soil erosion and sediment control plan.

The owner/developer and/or operator is responsible to perform environmental due diligence and determine that all fill imported to the site or exported from the site meets the DEP definition of clean fill.

Clean fill: uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)

Environmental due diligence: investigative techniques, including, but not limited to visual property inspections, electronic data base searches, review of property ownership, review of property use history, sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance.

Wastes generated during the construction of this project shall be recycled if at all possible. This shall include the erosion control BMPs. Any materials that cannot be recycled or reused shall be disposed of at a NPDES permitted site. If soil and/or rock disposal or borrow areas are required, approved erosion and sedimentation controls shall be implemented at these areas that meet Chapter 102 and/or other state and federal regulations.

All building materials and wastes must be removed from the site and recycled or disposed in accordance with the department's solid waste management regulations at 25 pa. Code 260.1 et seq. 271.1, and 287.1 et seq. No building materials or waste unused building materials shall be burned, buried, dumped or discharged at the site.

Anticipated construction wastes requiring recycling or disposal are:

1. Site construction waste.
2. Utility construction waste.
3. Concrete wash water.
4. Construction worker's trash.

Until the site is stabilized, all erosion and sediment control BMPs shall be maintained properly. All temporary control measures and facilities shall be inspected weekly and after each runoff event. Required repairs shall be made immediately, and shall be made by the site contractor. Disposal of all material cleaned from various sediment control devices shall be placed on the approved soil stockpile, which shall have filter fabric installed on the downhill side. A written log of inspections conducted, discrepancies found and repairs made will be maintained.

Thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. the end of each construction day, all sediment deposited on paved roadways shall be removed and returned to the construction site. Street sweeping shall be performed as needed. A water supply shall be provided to wash the wheels of all vehicles exiting the site. washing the roadway or sweeping the deposits into roadway ditches, sewer, culverts, or other drainage ways is prohibited.

Sediment must be removed when accumulations reach $\frac{1}{2}$ the above ground height of the filter. Any section of filter which has been undermined or topped must be immediately replaced with a weighted sediment tube. Compost filter sock is required to be used in place of filter fabric for the entire length of the filter. The filter must be located within an "exceptional value" watershed.

All concrete washout facilities shall be inspected daily. Damaged or leaking washouts should be deactivated and repaired or replaced immediately. Accumulated materials should be removed when they reach 75% capacity. Plastic liners should be replaced with each cleaning of the washout facility.

The site drains generally from North to South over land, eventually reaching the Unnamed Tributary to Cedar Run. Existing grade and slope is minimal on the majority of the property. Proposed impervious areas shall transport stormwater to the existing Bio-retention Pond. There is little or no impact on drainage patterns surrounding this lot.

Thermal impacts are minimized by primarily utilizing perimeter control measures with sheet flow. No sediment traps or basins are being proposed for these purposes.

Proposed impervious surfaces will drain to the subsurface infiltration basin BMP. The infiltration basin will decrease the post development volume generated by the 2 year storm event to less than pre-development conditions. The peak flows for all storm events are also decreased to or below pre-development levels. Water quality was also achieved by use of an infiltration basin. Therefore, based on the aforementioned criteria, there is no negative downstream impact as a result of this project. This project will preserve the integrity of stream channels and maintain and protect the physical, biological, and chemical qualities of the receiving stream.

S.OIL NAME	CUTBANKS CAVE CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	HYDRIC/HYDRIC INCLUSIONS	LOW STRENGTH/LANDSIDE PRONE SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE
dorthents	X	X	X	X	X	X	X	X	X	X	X	X
tagerstown	X	S	X	X	X	X	X	X	X	X	X	X
CUTBANKS WILL BE LIMITED TO 3:1 MAXIMUM SLOPE.	STORMDRAIN PIPES ARE PROPOSED TO BE HDPE	CONTRACTOR TO REFER TO "TABLE 11-3 PLANT TOLERANCES OF SOIL LIMITATION FACTORS" TO SELECT APPROPRIATE VEGETATION. EROSION CONTROL BLANKETS SHOULD ALSO BE CONSIDERED. EROSION CONTROL BLANKETS CAN HELP HOLD SOIL PARTICLES IN PLACE AND RETAIN SOIL MOISTURE, PROMOTING SEED GERMINATION.	DISTURBED AREAS SHALL BE LIMITED TO MINIMUM NECESSARY FOR CONSTRUCTION IN PROCESS	IF SATURATED SOILS ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION. DE-WATERING MAY BE NECESSARY DURING CONSTRUCTION			IF UNSUITABLE SOILS ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION. INFILTRATION BMP'S HAVE BEEN TESTED FOR ADEQUATE PERCOLATION	IF PIPING IS ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION. TOPSOIL SHALL BE TESTED AND AMENDED, AS NECESSARY. ADEQUATE BASE WILL BE PROVIDED FOR PAVED AREAS AND FOUNDATIONS WILL EXTEND BELOW FROST LINE	ADEQUATE BASE WILL BE PROVIDED FOR PAVED AREAS TO AVOID SHRINK/SWELL DAMAGE	IF SINKHOLES ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION.		

Contractor Notes

- The contractor shall be responsible for obtaining any required permits for the construction proposed on this plan.
- The contractor shall be responsible for the replacement of any damaged or destroyed existing site features that are to remain.
- All improvements shall meet the requirements of Lower Allen Township.
- The contractor shall be responsible for all traffic control, trench barricading, covering, sheeting and shoring, in accordance with applicable federal, state and local requirements.
- The location of existing underground utilities must be field verified by the contractor prior to construction, excavation and blasting.
- The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage done due to the contractor's negligence shall be immediately and completely repaired at the contractor's expense.
- The contractor shall legally dispose of all underground and above ground structures, features, and materials as required for the construction of the improvements shown on this plan.
- The contractor shall ensure the positive drainage away from all buildings.
- The contractor shall coordinate any and all utility service extensions/terminations with the utility owner.
- The contractor is responsible for all field testing and "record drawings" as required by various authority requirements.
- The contractor shall notify the appropriate authorities at least 10 days prior to the commencement of construction.
- The contractor shall call Pa One Call prior to beginning construction.

Post-Construction Stormwater Management (PCSM) Standard Notes

PCSM Requirements
A licensed professional or a designee shall be present onsite and be responsible during critical stages of implementation of the approved PCSM Plan. The critical stages may include the installation of the underground treatment or storage BMPs, structurally engineered BMPs, other BMPs as deemed appropriate by the department or the conservation district.
The PCSM Plan, inspection reports, and monitoring records shall be available for review and inspection by the department or the conservation district.

PCSM Long-Term Operations and Maintenance Requirements
The permittee or co-permittee shall be responsible for long-term operation of the PCSM BMPs unless a different person is identified in the notice of termination and has agreed to the long-term operation and maintenance of the PCSM BMPs.
A permittee or co-permittee that fails to transfer the long-term operation and maintenance of the PCSM BMP or otherwise fails to comply with this requirement shall remain jointly and severally responsible with the landowner for long-term operation and maintenance of the PCSM BMPs located on the property.

Notice of Termination and Recording of Plan
If the permittee is the landowner and will agree to be responsible for long-term operation and maintenance of the PCSM BMPs:

- An instrument, will be signed by the permittee (as both grantor and grantees) and notarized. The instrument, along with attachments, shall (to satisfy 25 Pa. Code §102.6(m)(2)):
 - Identify the PCSM BMP(s).
 - provide for the necessary access related to long-term operation and maintenance of the PCSM BMP(s), and
 - provide notice that the responsibility for long-term operation and maintenance of the PCSM BMP(s) is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees.
- The above instrument and attachments listed below shall be recorded within 45 days of permit issuance or authorization. The proof of filing the instrument and attachments shall be provided to the Department or conservation district within 90 days of permit issuance or authorization.
 - approved PCSM plan
 - operation and maintenance plan (synonymous with the long-term operation and maintenance schedule included within the PCSM plan)
- An operation and maintenance agreement will not need to be signed or recorded in this scenario because the permittee is the landowner.
- Unless the location and dimensions of the PCSM BMPs on the record drawings are the same as those on the PCSM plan, there are no subsurface BMPs, all BMPs are non-engineered and require minimal maintenance, and the operation and maintenance plan has not changed, the instrument will need to be amended in preparation for permit termination. The amended instrument will be recorded with the following attachments:
 - record drawings which accurately reflect as-built conditions
 - operation and maintenance plan (synonymous with the long-term operation and maintenance schedule included within the record drawings)
- The permittee shall provide "proof of filing" the instrument and attachments in the form of a receipt from the county Recorder of Deeds Office and complete Section 7.6 of the NOT form.

Post-Construction Stormwater Management Operation and Maintenance Owner/Operation

Bane II Investments, LLC
10 Kasey Court
Mechanicburg, PA 17055
Acknowledgement of Responsibility

I hereby acknowledge that, I am responsible for the Post-Construction operation and maintenance of all storm water management conveyances and BMPs as state below.

Owner/Operator _____ Date _____

Notes

- All stormwater conveyances and BMPs shown on this plan shall be constructed by the contractor in accordance with the design, conditions and specifications identified on this plan. Ownership, operation, and maintenance of the storm water management facilities shall be the responsibility of the landowner, his successors and assigns in perpetuity, unless specifically identified otherwise herein.
- Stormwater management conveyances and BMPs shall be operated and maintained in good working condition to ensure that they perform their design function, in a manner acceptable to the township and county.
- The owner shall inspect each stormwater management conveyance and BMP after each 1" rainfall event or at the minimum schedule noted on this plan. Appropriate action shall be taken to ensure that repair, replacement or other routine maintenance of the BMPs to ensure proper function and operation. All maintenance costs shall be borne by the owner. A written report documenting each inspection and all BMP repair and maintenance activities shall be kept by the property owner.
- Municipal and county officials and their agents or employees shall have the right of access for inspection and shall have the right at their discretion to maintain or repair the facilities as necessary to restore them to their design conditions. The cost to complete the maintenance or repair shall be borne by the responsible property owner(s).

Recycling & Disposal of Materials:

Wastes generated during the construction of this project shall be recycled if at all possible. This shall include the erosion control bmps. Any materials that cannot be recycled or reused shall be disposed of at a NPDES permitted site. If soil and/or rock disposal or borrow areas are required, approved erosion and sedimentation controls shall be implemented at these areas that meet chapter 102 and/or other state and federal regulations.

All building materials and wastes must be removed from the site and recycled or disposed in accordance with the department's solid waste management regulations at 25 Pa. code 260.1 et seq, 271.1, and 287.1 et seq. No building materials or waste unused building materials shall be burned, buried, dumped or discharged at the site.

Construction Waste:

- Anticipated waste materials for this project are rock, topsoil, subsoil, and building materials. Some rock, subsoil, and topsoil will be used on site during earth moving and construction of the proposed access drives and utilities installation. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 PA. Code 260.1 et seq, 271.1, and 287.1 et. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.

Concrete Washout:

- A compost sock washout detail has been provided, but prefabricated washout containers, self-installed washouts, or wastewater recycling systems may be substituted as long as manufacturer specification and PA DEP requirements are met.
- Sediment traps and basins may not be used as concrete washout devices.
- Washout facilities should not be placed within 50' of storm drains, open ditches, or surface waters, in an area accessible for trucks and on slopes less than 2%, where possible.
- Maintenance:
 - All concrete washout facilities should be inspected daily. Damages or leaking washouts should be deactivated and repaired or replaced immediately.
 - Accumulated materials should be removed when they reach 75% capacity.
 - Plastic liners should be replaced with each cleaning of the washout facility.

Permanent Stabilization

- Permanent stabilization is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.
- All topsoil shall be replaced at a minimum depth of at least 6 inches in order to promote stormwater infiltration and permanent vegetative stabilization on all disturbed areas to be permanently revegetated.
- All topsoil shall be loosened to a depth of at least 4 inches. All objectionable material larger than 2 inches shall be removed.
- Contractor shall provide soil testing pH before implementing permanent seeding. Limestone and fertilizer shall be applied uniformly in areas to be seeded and worked into the soil to a depth of 2 inches. In the absence of soil testing, apply limestone and fertilizer per the application rate specified below:
 - Limestone - pulv ag at 5 tons per acre.
 - Fertilizer - 100 lbs/acre N, 200 lbs/acre P2O5, 200 lbs/acre K2O
- Mulch of long stem straw shall be applied at an even application rate of 3 tons per acre with a surface covering of 100%. Mulch shall be either mechanically stabilized or stabilized by use of a tackifier.
- Hydroseed is not considered stabilized until it germinates.

Areas of Minimized Total Disturbance - Grading

- Area shall not be subject to grading or movement of existing soils
- Existing native vegetation in a healthy condition may not be removed
- Invasive non-native vegetation may be removed
- Pruning or other required maintenance of vegetation is permitted. Additional planting is permitted
- Area shall be protected by having limits of disturbance clearly shown on all construction drawings and delineated in the field.
- The area not subject to grading shall be clearly delineated on the Stormwater Management Plan. If future grading or disturbance of this area occurs, subsequent stormwater management must be provided to address disturbance.
- Area shall not be located on the development project.

Ownership, Operation and Maintenance Notes:

- All stormwater conveyances and BMPs shown on this plan shall be constructed by the contractor in accordance with the design, conditions and specifications identified on this plan. Ownership, operation, and maintenance of the storm water management facilities shall be the responsibility of the landowners (Bane II Investments, LLC), his successors and assigns in perpetuity, unless specifically identified otherwise herein.
- The owner shall inspect each stormwater management conveyance and BMP after each 1" rainfall event or at the minimum schedule noted on this plan. Appropriate action shall be taken to ensure that repair, replacement or other routine maintenance of the BMPs to ensure proper function and operation. All maintenance costs shall be borne by the owner.
- A written report documenting each inspection and all BMP repair and maintenance activities shall be kept by the property owner.
- Municipal and county officials and their agents or employees shall have the right of access for inspection and shall have the right at their discretion to maintain or repair the facilities as necessary to restore them to their design conditions. The cost to complete the maintenance or repair shall be borne by the responsible property owner(s).
- Any debris, sediment, contamination, spills, replaced structures, etc. should be disposed of in a composting facility, trash container, or disposed or recycled in a manner as per the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq, 271.1 and 287.1 et, and 25 Pa. Code 102.4(b)(5)(x).

Subsurface Basin:

- Schedule:
- Inspect on a quarterly basis
 - After every storm event greater than 1"

Inspection/Maintenance:
-Inspect for structural integrity and operation of the system, outlet structure, inlet structures, and appurtenances. Inspect for surface depressions or other signs of potential structural deficiencies. Repair as necessary to design conditions.
-Inspect after runoff events to ensure drawdown in 72 hours.
-Inspect for sediment and debris accumulation in system and connected structures. Remove any sediment and debris as necessary. Properly dispose of sediment.
-Ensure that outlet structure and all appurtenances, water quality devices, and inlets are free of debris and have clear opening as designed. Remove and dispose of any accumulated debris.
-Inspect for sinkholes. Repair as per Sinkhole Repair Detail.
-Inspect for signs of water contamination/spills. Properly remove.
-Inspect catch basins and inlet (upgradient of the BMP). Remove sediment and debris as necessary.
-Inspections of BMPs can be performed via the inspection/maintenance ports, upstream inlet, and outlet structure. Each of these features can be accessed by removing the lid at the surface for a visual inspection for debris or collected sediment. Check the condition of all access points with a flashlight. Use a mirror or a pole or other device to check for sediment accumulation within the system if sediment is observed. The depth should be measured, recorded in the inspection log and removed as per Maintenance Notes below.
-If standing water is found within the BMP after 72 hours following a storm event, refer to Maintenance Steps below.

- Additional Maintenance:
 - If standing water in found within the BMP, the water shall be pumped out into the system outlet structure to dewater the system, and the system may be televised to try and determine the cause of the standing water. If no issue is found, the system should be inspected following the next three rain events exceeding 0.25 inches. If the system is still found to not be dewatering, an engineer shall be consulted for an evaluation of the facility in order to develop a revised system design for PADEP or Conservation District approval.
 - Vegetation tributary to the BMP shall be maintained in accordance with the approved plan and township ordinance.
 - Remove accumulated sediment and debris from the BMP as required. Sediment shall be removed via back-flushing per the instruction below prior to reaching the height of 3". Properly dispose of sediment in accordance with PADEP regulations. Floatable debris that may impact the operation of the inlet structures shall be removed immediately.
 - To back-flush the system, pump water into the system through maintenance ports as rapidly as possible. Water should be pumped into all maintenance ports. The turbulent action of the water will suspend sediments, which may be pumped out via one of the inlet structures. Ideally, perform this maintenance within 24 hours of a rainfall event so the runoff entering the system will aid in the sediment suspension and reduce the volume required to properly flush the system. Once removed, sediment-laden water should be captured for disposal or pumped through a filter bag. Properly dispose of sediment in accordance with all federal, state, and local regulations.

Stormwater Pipes and Appurtenances:

- Schedule:
- Inspect on a quarterly basis
 - After every storm event greater than 1"

Inspection/Maintenance:
-Inspect stormwater pipes for debris and/or sediment. Remove and/or flush debris and/or sediment from stormwater pipes and dispose of sediment in accordance with current sediment disposal procedures.
-Inspect the structural integrity of stormwater pipes and appurtenances. Repair or replace damaged pipes and appurtenances.

Riprap Outlet Protection:

- Schedule:
- Inspect on a quarterly basis
 - After every storm event greater than 1"

Inspection/Maintenance:
-Inspect for erosion at outlets.
-Inspect for loss of riprap.
-If the specified riprap size is not adequate to control erosion, install a riprap of a larger size.
-Replace riprap, as needed to maintain the original design specifications.

Landscaping & Vegetation:

- Schedule:
- Inspect monthly during the growing season (April through November)

Inspection/Maintenance:
-Inspect for dead portion of the plantings. Remove dead portion and dispose at an approved compost facility.
-Inspect for dead planting. Remove dead plantings and dispose in an approved composting facility. Replace dead planting.
-Inspect for diseased portion of plantings and for insects that may damage plant material. Remove diseased portion of planting and dispose in an approved compost facility. Treat unaffected plantings for any insects that may damage planting. If planting is too diseased, replace as necessary.

Permeable Pavers:

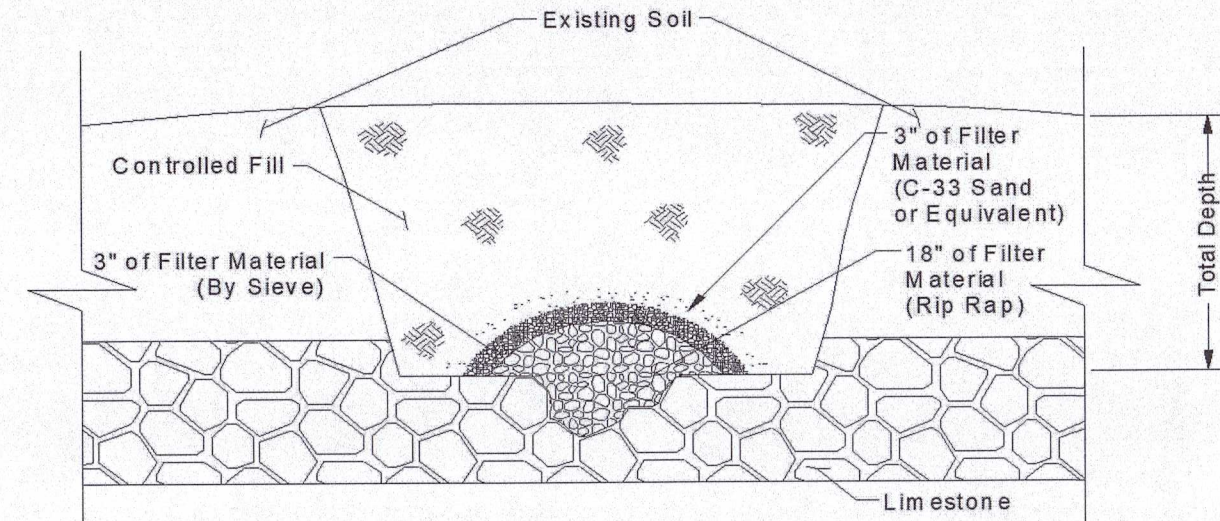
- Schedule:
- Inspect on a quarterly basis
 - After every storm event greater than 1"

Inspection/Maintenance:

- Vacuum pavement twice per year.
- Maintain planted areas adjacent to pavement.
- Immediately clean any soil deposited on pavement.
- Do not allow construction staging, soil/mulch storage, etc. on unprotected pavement surface.
- Clean inlets draining to the subsurface bed twice per year.
- Do not apply abrasives such as sand or cinders on or adjacent to porous pavement.
- Snow plowing is fine but should be done carefully (i.e set the blade slightly higher than usual)
- Salt application is acceptable, although more environmentally-benign deicers are preferable
- Surface should never be seal coated
- Damaged pavers shall be replaced immediately

SOIL USE LIMITATIONS/RESOLUTIONS

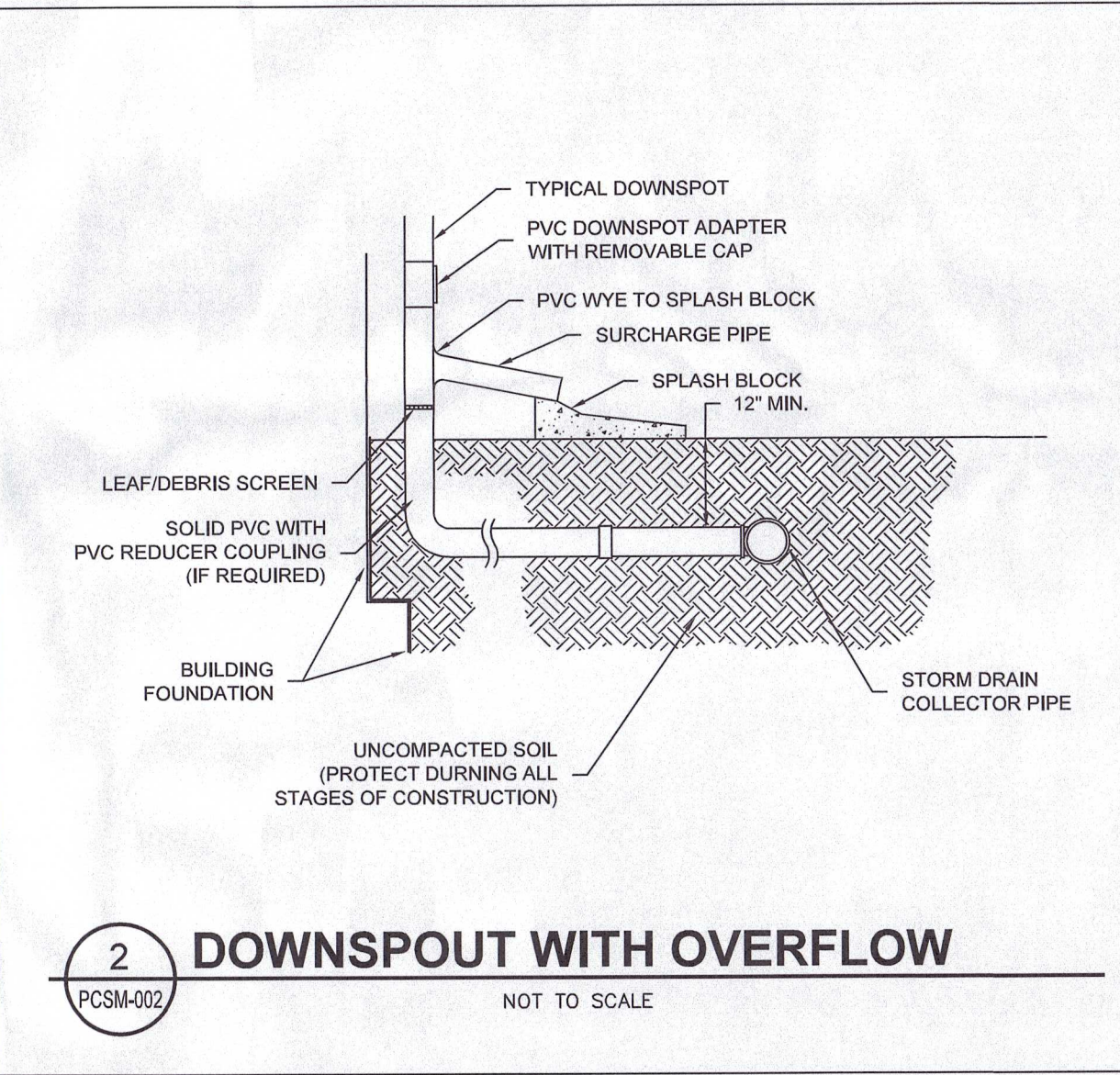
SOIL NAME	CUTBANKS CAVE	CUTBANKS TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE / SEASONAL HIGH WATER TABLE	HYDRIC/H/DIC INCLUSIONS	LOW STRENGTH/ LANDSIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Udorthents	X	C/S	X	X				X	X		X	X	X			
Hagerstown	X	S		X		X		X	X	X	X	X	X	X		
CUTBANKS WILL BE LIMITED TO 3:1 MAXIMUM SLOPE																
STORMDRAIN PIPES ARE PROPOSED TO BE HDPE																
CONTRACTOR TO REFER TO "TABLE 11-3: PLANT TOLERANCES OF SOIL LIMITATION FACTORS" TO SELECT APPROPRIATE VEGETATION. EROSION CONTROL BLANKETS SHOULD ALSO BE CONSIDERED. EROSION CONTROL BLANKETS CAN HELP HOLD SOIL PARTICLES IN PLACE AND RETAIN SOIL MOISTURE, PROMOTING SEED GERMINATION.																
DISTURBED AREAS SHALL BE LIMITED TO MINIMUM NECESSARY FOR CONSTRUCTION IN PROCESS																
IF SATURATED SOILS ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION. DE-WATERING MAY BE NECESSARY DURING CONSTRUCTION																
IF UNSUITABLE SOILS ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION. INFILTRATION BMPs HAVE BEEN TESTED FOR ADEQUATE PERCOLATION																
IF PIPING IS ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION.																
TOPSOIL SHALL BE TESTED AND AMENDED, AS NECESSARY.																
ADEQUATE BASE WILL BE PROVIDED FOR PAVED AREAS AND FOUNDATIONS WILL EXTEND BELOW FROST LINE																
ADEQUATE BASE WILL BE PROVIDED FOR PAVED AREAS TO AVOID SHRINK/SWELL DAMAGE																
IF SINKHOLES ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATION.																



Notes:

- Inverted Filter 1
- Procedure for installing inverted filter to treat sinkholes.
- Remove and properly dispose of materials dumped in and around the sinkhole.
 - Excavate loose material from sinkhole and try to expose the solution void(s) in the bottom. Enlarge the sinkhole, as necessary, to allow for installation of filter materials (Figure 1).
 - Select a field stone that is about 1.5 times larger than the solution void(s). Place the stone(s) in the void(s) forming a secure "bridge". A geotextile may be needed to "lock" the stone "bridge" in place, as determined by the geotechnical engineer.
 - Place a layer of filter material over the "bridge" at a minimum thickness of 18 inches. About 30 percent of the material should be larger than the openings between the bridge and the void(s). (A well placed "bridge" should not have large openings around it.) In most cases this material could be Rip Rap.
 - Place a layer of smaller size filter material over the previous layer at a minimum thickness of 9 inches. The size should be 1/4 to 1/2 the size of the pervious layer. In most cases this material could be C-33 sand or equivalent.
 - Place a layer of sand size filter material over the previous layer at a minimum thickness of 9 inches. The sand has to be compatible in size with the previous layer to prevent piping. In most cases this material could be C-33 sand or equivalent.
 - (A non-woven filter cloth with a burst strength between 100 to 200 psi can be substituted for the stone and sand filter materials discussed in 5 and 6.)
 - Backfill over the last filter layer (or filter cloth) with soil material to the surface. The reuse of any soil material excavated from sinkhole should be considered. Overfill by about 5 percent to allow for settlement. The material should be soil with at least 50% clay materials and a minimum of 3 feet thick. The fill materials should be compacted to a minimum of 95% of the standard proctor (AASHTO T-99). Any available topsoil should be placed on the surface.
 - Stone used for the "bridge" and the filters should have a rock strength at least equal to moderately hard (i.e. resistant to abrasion or cutting by knife blade but can be easily dent or broken with light blows of hammer). Shale or similar soft and non-durable rock is not acceptable.

SINKHOLE REMEDIATION DETAIL



NOTES:

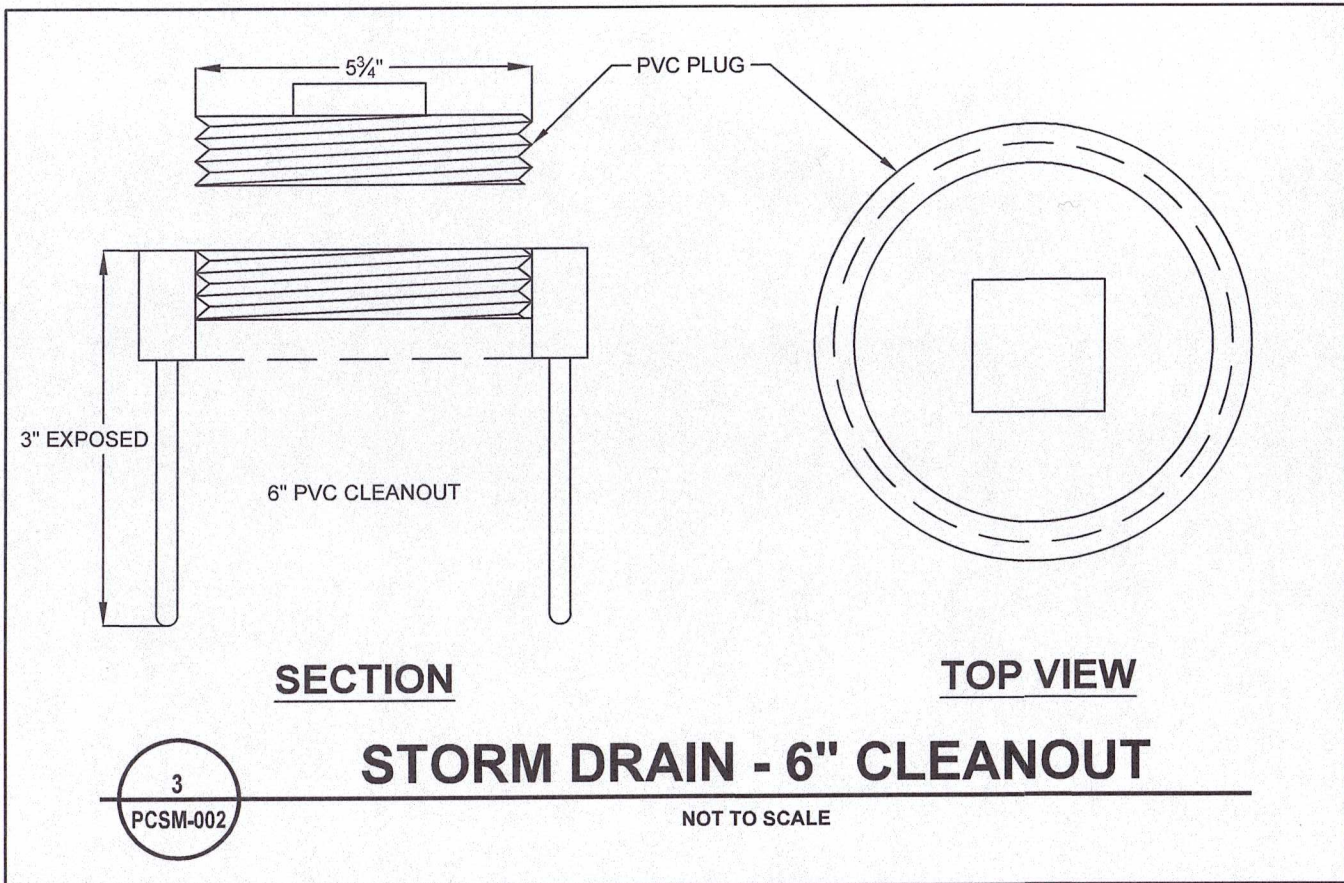
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL

1
PCSM-002

NOT TO SCALE



3
PCSM-002

NOT TO SCALE

SPRING LAKE APARTMENTS


SITUATED SOUTH OF THE INTERSECTION
OF CARLELE ROAD AND ORCHARD ROAD
LOWER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA
Bane II Investments, LLC c/o Mike Weidner
10 Kasey Court, Mechanicburg, PA 17055
717.446.4141

PROJECT NO. 2022-0012
OWN BY CMH DATE 6-29-2023
PROJECT MANAGER JTD
EMAIL: jtdoty@sa-inc.com
PROPERTY ID # 13-23-0549-138
SCALE NTS
SHEET TITLE

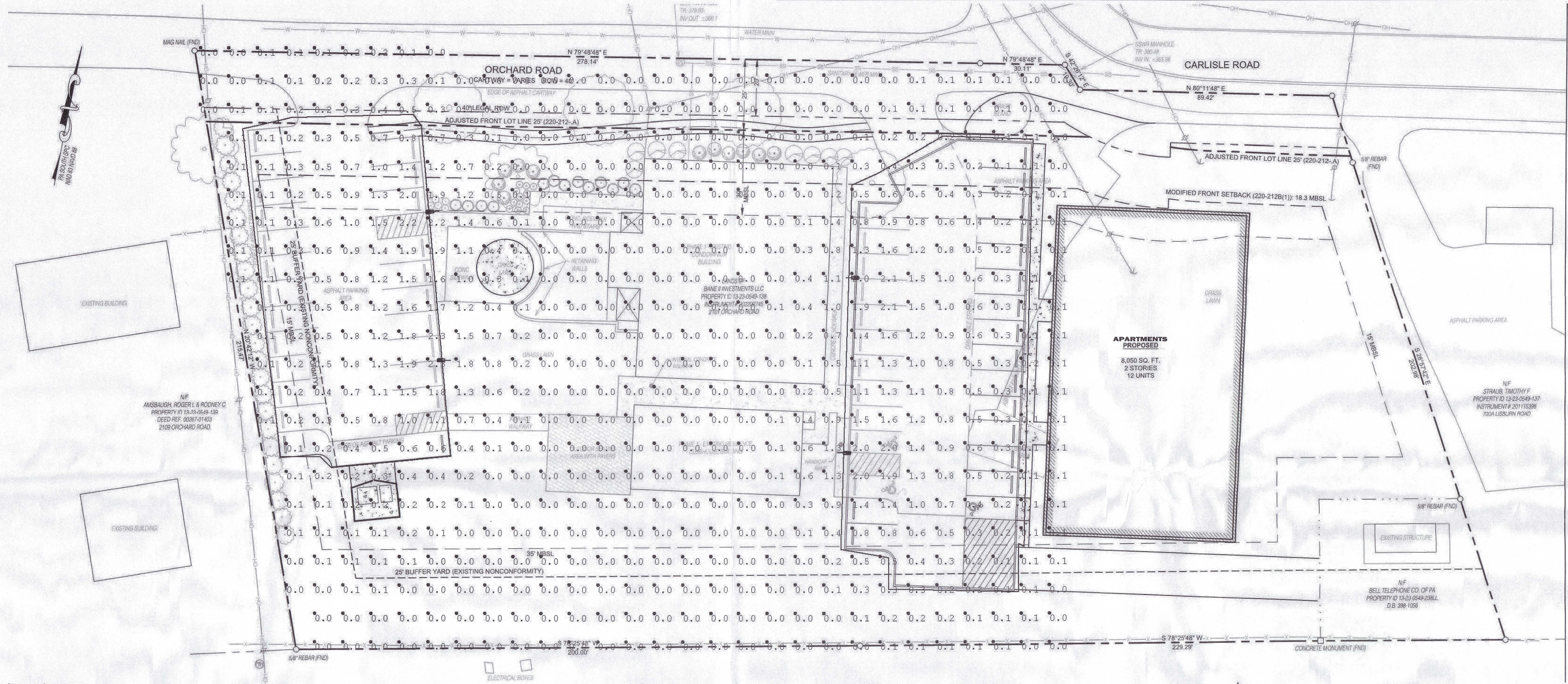
PCSM NOTES
& DETAILS

PCSM-002
SHEET 13 OF 13

* A copy of the approved Post Construction Stormwater Management Plan/Narrative shall be provided onsite throughout the duration of project construction. *

Luminaire Schedule				
Symbol	Qty	Label	Description	Lumens/Lamp
	4	35W TYPE II	SL34 20' POLE	5550

Numeric Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.31	2.3	0.0	N.A.	N.A.
LEFT LOT	Illuminance	Fc	0.87	2.3	0.1	8.70	23.00
RIGHT LOT	Illuminance	Fc	0.72	2.1	0.1	7.20	21.00



WEIDNER CONSTRUCTION

Solar Illuminations

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Fort Myers, FL 33912
TELEPHONE: 239-461-5522
EMAIL: sales@solarilluminations.com



NOTES & DISCLAIMER: The photometric data, rendering, plan, information and lighting distribution shown in these documents is a design. It is to be used as an example and guide only as to the typical performance of the luminaire specified. Any changes made to the site plan may affect the information shown. In addition, other known and unknown factors may affect the performance of the luminaire resulting in changes to the information shown. It is assumed that the buyer, installer or project manager is a capable professional, fully conversant with solar and LED technologies and capable of conducting electrical and civil works. Consideration must be given to the power generation of the solar panel which must be of an appropriate Wattage. The solar panel (if adjustable) must be installed at the correct angle (subject to geographic location), facing South and not subjected to any shade or part shade during the day. Solar Illuminations is not qualified to determine the structural appropriateness of their designs and is not responsible and cannot be held liable for any improper engineering, construction, installation or handling methods or for any improper use of structures or equipment that may be employed to realize the design. It is the responsibility of the buyer, installer or project manager to ensure that (if applicable) the design complies with local fire, health & safety and any other codes, standards or regulations etc. In the event that this design is found not to comply, Solar Illuminations may adjust the design in consultation with the buyer, installer or project manager to ensure that it does comply with such regulations. Solar Illuminations accepts no responsibility or liability by the provision of this document and the information contained herewith. If you have any questions, please contact Solar Illuminations for further information. E&OE.