

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 315-1800 AT LEAST 48 HOURS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-251-7777 AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION WORK.
4. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES AT (410) 315-4900 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
5. PROJECT BACKGROUND:
 - LOCATION: TAX MAP 36
 - ZONING: NT-EMPLOYMENT CENTER COMMERCIAL
 - ELECTION DISTRICT: FIFTH ELECTION DISTRICT
 - AREA OF BUILDABLE LOTS: 111 & AC
 - RECORD PLAT NO.: 18353 & 18354
6. DPZ REF. FILE NO.: F 85-155, F 71-52G, FDP III-A-1, F 08-33, SDP 05-156C, F-04-24, SDP 03-136, WP 05-111, & F-06-222.
7. EXISTING TOPOGRAPHY IS SHOWN PER FIELD RUN SURVEY PERFORMED DURING NOVEMBER/DECEMBER 2004 BY GUTSCHICK LITTLE & WEBER, P.A.
8. COORDINATES ARE BASED ON NAD '21 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION NUMBERS.
9. THE EXISTING UTILITIES SHOWN HEREIN WERE DERIVED FROM AVAILABLE PUBLIC RECORDS AND FIELD LOCATIONS BY GUTSCHICK LITTLE & WEBER, P.A. THE CONTRACTOR MUST DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY EXACT LOCATION.
10. SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL PLAN DIMENSIONS ARE TO THE FACE OF BUILDING OR CURB UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIAL BETWEEN ITEMS UNLESS NOTED OTHERWISE.
12. THERE ARE NO KNOWN GRAVE SITES, CEMETERIES, FLOOD PLAINS OR WETLANDS ON SITE AS PER RECORDED PLAT NO. 16142 (F 04-24) & PLAT NOS 18353 & 18354 (F-06-222).
13. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
14. WATER SERVICE IS PUBLIC (CONTR. #24-4210-D).
15. SEWER SERVICE IS PUBLIC (CONTR. #24-4210-D).
16. AN UPDATED TRAFFIC IMPACT STUDY WAS PERFORMED BY HELLS & ASSOCIATES FOR THIS PROJECT. THE STUDY WAS APPROVED JULY, 2005. A FURTHER UPDATED TRAFFIC STUDY DATED SEPTEMBER 26, 2015 WAS PREPARED BY THE TRAFFIC GROUP AND APPROVED BY HOWARD COUNTY ON DECEMBER 15, 2015.
17. THE PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE SECTION 16.1202(B)(1)(IV) (FUD WITH A FDP APPROVED PRIOR TO 12/31/12).
18. THE CONTRACTOR SHALL TEST FIT ALL EXISTING UTILITIES AT LEAST (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS AND NOTIFY THE ENGINEER OF ANY CONFLICTS.
19. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
20. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS PER COUNCIL BILL NO 45-2009.
21. NOTE: IN CASE OF DISCREPANCIES BETWEEN THE PLAT AND THE PLANS, THE PLAT SHALL GOVERN.
22. ALL PRIVATE OUTDOOR LIGHTING SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING PUBLIC ROADS AND IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.

THE PROPOSED LIGHTING IS A LOW INTENSITY PEDESTRIAN TYPE OF FIXTURE IN ACCORDANCE WITH SECTION 134(C)(3). THE LAMPS HOUSED BY THE FIXTURE DO NOT EXCEED A TOTAL OF MORE THAN 16,000 LUMENS AND THE LAMPS ARE LESS THAN 14 FOOT ABOVE GROUND LEVEL. IN ACCORDANCE WITH SECTION 134(C)(3) NO SHIELDS ARE REQUIRED FOR THIS TYPE OF FIXTURE.

23. LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$5,000.00 SHALL BE POSTED WITH THE DEVELOPERS AGREEMENT FOR THIS SITE PLAN. SDP-05-094. FOR INFORMATION ON THE REQUIRED LANDSCAPE PLANTING AND ASSOCIATED SURETY, SEE SHEETS 6-7.

24. THE MINIMUM BUILDING SETBACKS RESTRICTIONS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS OF WAY ARE TO BE IN ACCORDANCE WITH FDP III-A-1 RECORDED ON 2/11/01 AS PLAT NOS. 15232 THROUGH 15234.

25. COUNTY COUNCIL RESOLUTION NO. 114-2003 WAS APPROVED ON JULY 30, 2003 TO ABANDON 3 WATER AND UTILITY EASEMENTS AND 1 SEWER AND UTILITY EASEMENT LOCATED ON THIS PARCEL AS SHOWN ON PLAT NO. 16142.

26. THE PROPOSED BUILDING WILL HAVE AN AUTOMATIC FIRE SUPPRESSION SPRINKLER SYSTEM.

27. IN ACCORDANCE WITH FDP III-A-1, THERE ARE NO HEIGHT LIMITS, NO MAXIMUM BUILDING COVERAGES, NOR ARE THERE ANY SPECIFIED BUILDING SETBACKS FOR THIS SITE, EXCEPT AS APPROVED BY THE HOWARD COUNTY PLANNING BOARD ON A SITE DEVELOPMENT PLAN.

28. TRASH COLLECTION FOR THIS SITE WILL BE INTERNAL TO THE BUILDINGS. NO OUTSIDE FACILITIES ARE PROPOSED.

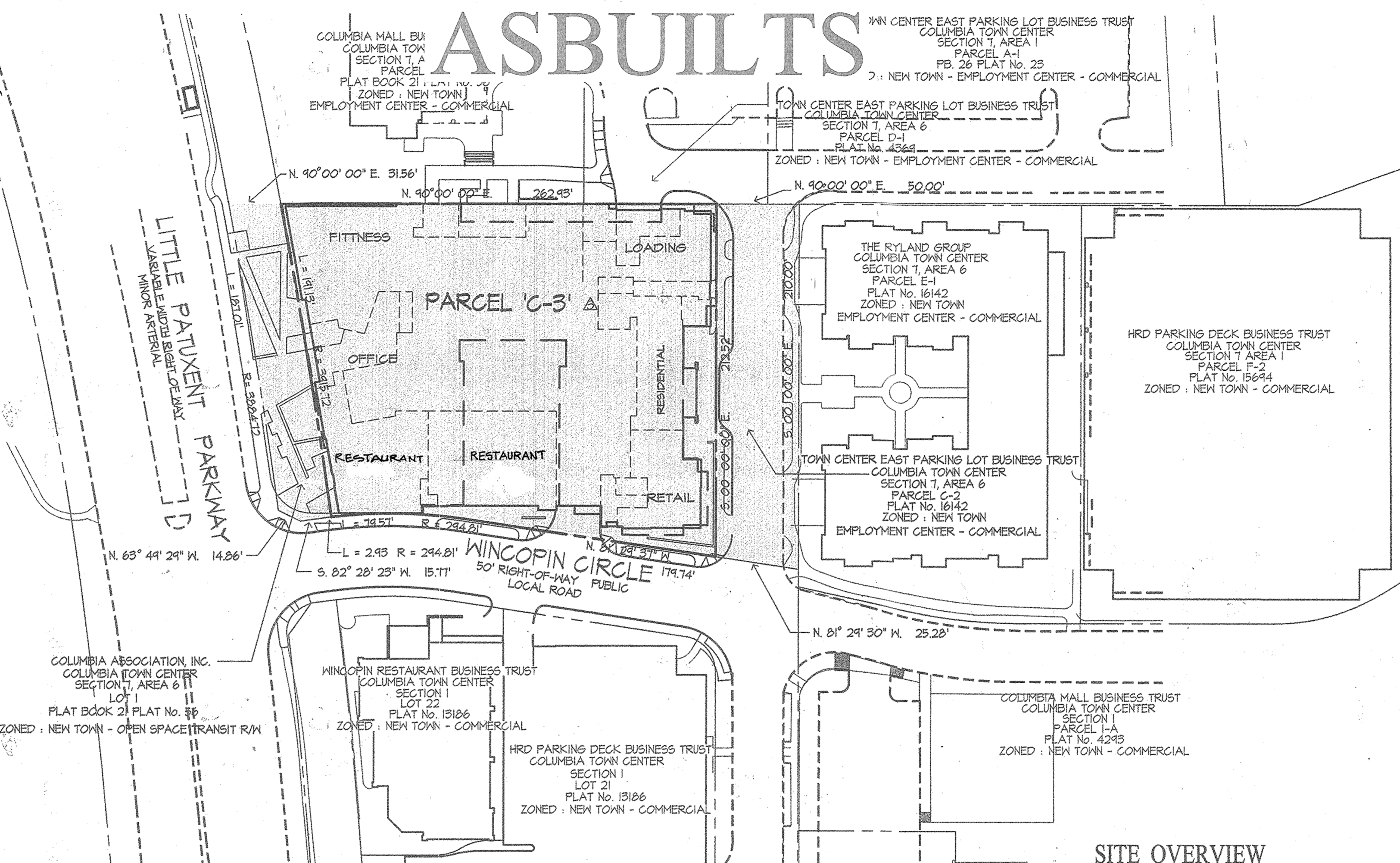
29. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.A AND THE DOWNTOWN COLUMBIA GUIDELINES. A MINIMUM OF 2' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.

30. THE HOWARD COUNTY PLANNING BOARD ORIGINALLY APPROVED THIS SDP ON JANUARY 18, 2006 SUBJECT TO REQUIRING THE COFFEE SHOP AREA LOCATED ON THE MEZZANINE LEVEL OF THE BUILDING TO COMPLY WITH THE PARKING SPACE REQUIREMENT OF FDP-III-A-1.

31. THE HOWARD COUNTY PLANNING BOARD APPROVED THE 2015 REVISIONS TO THIS SDP ON JANUARY 2, 2014.

32. TRAFFIC CONTROL DEVICES:
 - A) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-315-2400) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
 - B) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).
 - C) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED (QUICK PUNCH), SQUARE TUBE POST (4 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED SQUARE TUBE SLEEVE (2 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO QUICK PUNCH HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
33. A MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE DEVELOPER AND HOWARD COUNTY DEPT. BUREAU OF HIGHWAYS REGARDING THE MAINTENANCE OF THE BRICK SIDEWALK AND CROSSWALK LOCATED IN THE COUNTY RIGHT-OF-WAY WILL BE SIGNED AS PART OF THE DEVELOPERS AGREEMENT.

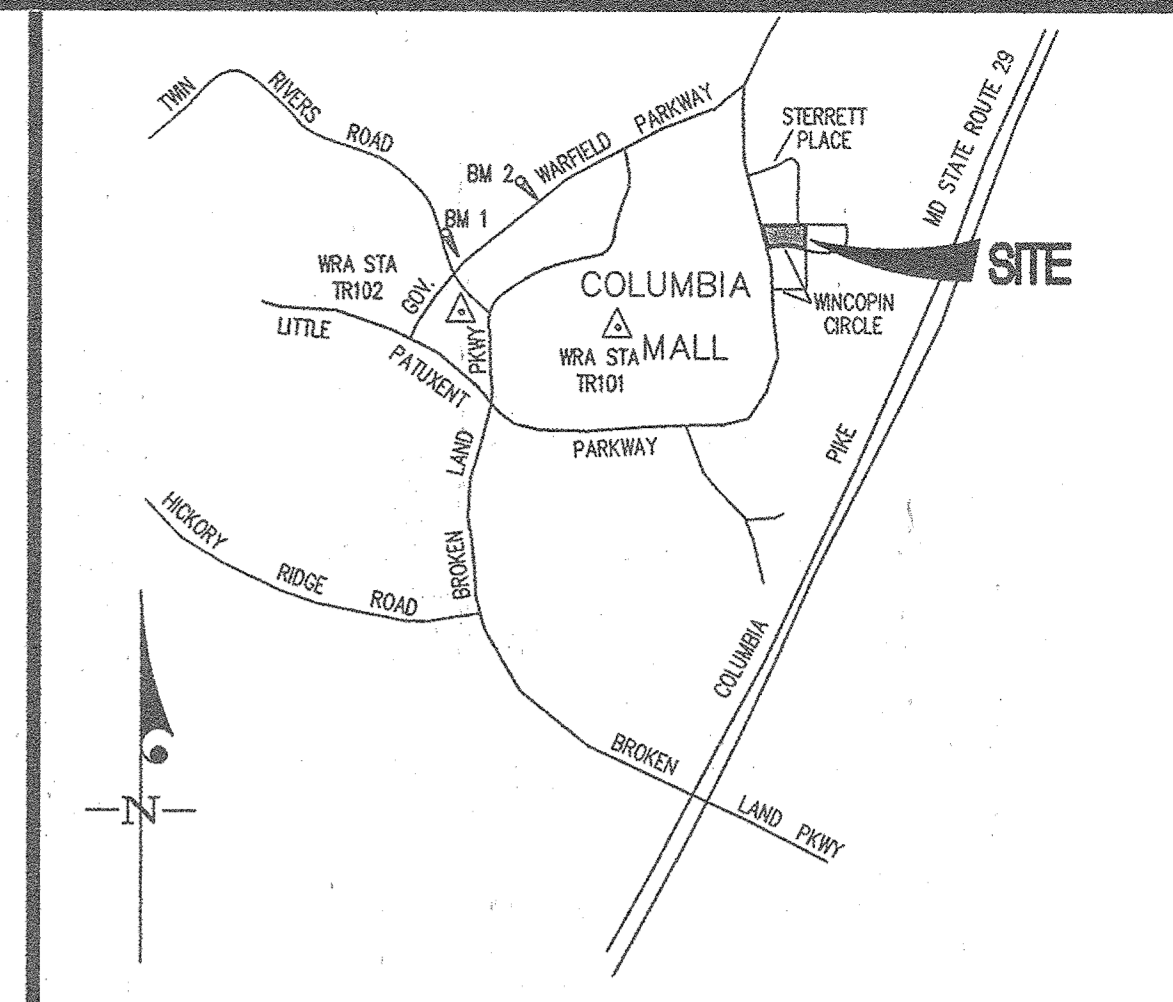
COLUMBIA TOWN CENTER SECTION 7 AREA 6 - PARCELS 'C-2', 'C-3' 'B', 'D-1' and OPEN SPACE LOT 1 SITE DEVELOPMENT PLAN



BENCHMARK DESCRIPTIONS

BM #1 (GLN TRAV. 9001) TOP OF REBAR & CAP IN MEDIAN OF GOV. WARFIELD PARKWAY, 250' +/- OF INTX. OF THIN RIVERS ROAD. ELEV. = 431.22

BM #2 (GLN TRAV. 9002) TOP OF REBAR & CAP EAST SIDE OF GOV. WARFIELD PARKWAY BEHIND ASPHALT PATH, 1000' +/- EAST OF INTX. OF THIN RIVERS ROAD. ELEV. = 404.76



STORMWATER MANAGEMENT FACILITY SUMMARY TABLE

AREA TO FACILITY = 1.25 acres
IMPERVIOUS = 41.2%

	REQUIRED	PROVIDED
Mgv =	2,155 cu.ft. @ 0.90 cfs	6,071 cu.ft.*
Cpv =	2,445 cu.ft. @ 0.04 cfs	6,071 cu.ft.*
Rev =	450 cu.ft.	508 cu.ft.

PRIVATELY OWNED AND MAINTAINED WATER QUALITY FACILITY. DETENTION AND AID TREATMENT OF MGV AND Cpv ACCOMPLISHED BY BELOW GRADE STORAGE MANIFOLD AND STORMFILTER(TM) WATER FILTRATION DEVICE.

- SITE DEVELOPMENT PLAN SHEET INDEX**
- 1 COVER SHEET
 - 2 SITE DEVELOPMENT PLAN
 - 3 PARKING GARAGE DETAILS AND SITE DETAILS
 - 4 SITE AND HANDICAP ACCESSIBILITY DETAILS
 - 5 SITE DETAILS
 - 6 LANDSCAPE PLAN
 - 7 LANDSCAPE NOTES & DETAILS
 - 8 SEDIMENT CONTROL PLAN
 - 9 SEDIMENT CONTROL NOTES & DETAILS
 - 10 UTILITY PROFILES - WATER, SEWER AND STORM DRAIN
 - 11 STORMWATER MANAGEMENT DETAILS
 - 12 STORM DRAIN DRAINAGE AREA MAP
 - 13 STORMWATER MANAGEMENT DRAINAGE AREA MAP
 - 14 SIGNING, MARKING AND STREET LIGHTING PLAN
 - 15 EXCAVATION SHORING PLAN
 - 16 SHORING PLAN
 - 17 SHORING DETAILS
 - 18 SHORING DETAILS
 - 19 SHORING DETAILS
- SITE ANALYSIS**
1. GENERAL SITE DATA
 - A. AREA TABULATION FOR SITE: 1.46 AC. PARCEL C-3 AREA: 1.11 AC. PART OF PARCEL C-2 AREA: 0.13 AC. PART OF PARCEL B AREA: 0.06 AC. PART OF OPEN SPACE LOT 1 AREA: 0.14 AC. PART OF PARCEL D-1 AREA: 0.02 AC.
 - B. AREA OF THIS SDP SUBMISSION: 1.46 AC.
 - C. LIMIT OF GRADING DISTURBANCE: 2.25 AC.
 2. FLOOR AREA RATIO: 310,868 sf / 48,341 sf = 7.61 : 1
 3. TOTAL PROPOSED MAXIMUM BUILDING AREA: 653,264 SF. (INCL. GAR.)

FDP III-A-1 CRITERIA ANALYSIS

1. GENERAL SITE DATA

A. PRESENT ZONING: NT - EMPLOYMENT CENTER - COMMERCIAL (FDP III-A-1)

B. PERMITTED USES (PARAGRAPH 7): ALL USES PERMITTED IN COMMERCIAL DISTRICTS OR COMMERCIAL LAND ZONES ARE PERMITTED. APARTMENTS MAY BE LOCATED IN LOT 2 AREA DESIGNATED FOR COMMERCIAL USE IN CONJUNCTION WITH THE MIX OF USES ALLOWED IN THE B-15-2, AND S-C ZONING DISTRICTS IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HO. CO. PLANNING BOARD.

C. PROPOSED USE OF SITE: APARTMENTS, COMMERCIAL, OFFICE, PARKING, & FITNESS

2. PARCEL 'C-3' DEVELOPMENT DATA

A. APARTMENTS PARKING REQUIREMENTS:

1. PROPOSED NUMBER OF UNITS: 160

2. APARTMENT PARKING REQUIREMENTS (PARAGRAPH 10): NO LESS THAN 15 OFF STREET PARKING SPACES CONTAINING A MINIMUM AREA OF 162 SQUARE FEET FOR EACH PARKING SPACE FOR EACH DWELLING UNIT SHALL BE PROVIDED FOR APARTMENT USES. ALL AS APPROVED ON A SITE DEVELOPMENT PLAN BY THE HOWARD COUNTY PLANNING BOARD. PARKING IS ALLOWED IN ADJACENT FINAL DEVELOPMENT PLAN PHASES AND OR OTHER LAND USES AS APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

15 SPACES PER UNIT = 240 SPACES
7 SPACES = 7 SPACES
2 SPACES = 2 SPACES

GUEST/OVERFLOW PARKING REQUIRED: 0.3 SPACES PER UNIT = 48 SPACES
TOTAL SPACES REQUIRED = 288 SPACES

B. OFFICE PARKING REQUIREMENTS:

1. PROPOSED OFFICE: 119,324 square feet (NET LEASABLE AREA)

2. OFFICE PARKING REQUIREMENTS (PARAGRAPH 11): TWO PARKING SPACES SHALL BE PROVIDED FOR EACH 1,000 SQUARE FEET OF NET LEASABLE AREA CONTAINED WITHIN ANY BUILDING ON BUILDINGS

NUMBER OF PARKING SPACES REQUIRED (2 SPACES PER 1,000 SF.) 119,324 x 2/1,000 = 239 SPACES

C. RETAIL PARKING REQUIREMENTS (LOCATED ON THE LOWER GROUND AND UPPER GROUND LEVELS):

1. PROPOSED RETAIL: 4,671 square feet (NET LEASABLE AREA)

2. RETAIL PARKING REQUIREMENTS (PARAGRAPH 9): FIVE PARKING SPACES SHALL BE PROVIDED FOR EACH 1,000 SQUARE FEET OF NET LEASABLE AREA DEVOTED TO COMMERCIAL RETAIL SALES USES

NUMBER OF PARKING SPACES REQUIRED (5 SPACES PER 1,000 SF.) 4,671 x 5/1,000 = 23 SPACES

D. RESTAURANT PARKING REQUIREMENTS (LOCATED ON THE LOWER GROUND LEVEL):

1. PROPOSED RESTAURANT: 222 SEATS AND EMPLOYEES 60772 SF

2. RESTAURANT PARKING REQUIREMENTS (PARAGRAPH 11): ONE PARKING SPACE SHALL BE PROVIDED FOR EVERY THREE SEATS AND ONE SPACE SHALL BE PROVIDED FOR EACH FIVE EMPLOYEES

NUMBER OF PARKING SPACES REQUIRED (1 SPACE PER 3 SEATS AND 1 SPACE PER 5 EMPLOYEES) 222/3 + 60772/5 = 127 SPACES

SITE OVERVIEW
SCALE: 1" = 50'

E. FITNESS PARKING REQUIREMENTS (LOCATED ON THE UPPER GROUND LEVEL AND SECOND FLOOR):

1. PROPOSED FITNESS: 11,413 square feet (NET LEASABLE AREA)

2. FITNESS PARKING REQUIREMENTS: TEN PARKING SPACES SHALL BE PROVIDED FOR EACH 1,000 SQUARE FEET OF ASSEMBLY AREA

NUMBER OF PARKING SPACES REQUIRED (10 SPACES PER 1,000 SF.) 11,413 x 10/1,000 = 115 SPACES

6. TOTAL PARKING REQUIREMENTS:

1. TOTAL SPACES REQUIRED: 288 (RESIDENTIAL) + 234 (OFFICE) + 24 (RETAIL) + 175 (FITNESS) + 119 (RESTAURANT) + 11 (SCHOOL) = 821 SPACES

USING THE SHARED PARKING ADJUSTMENT DESCRIBED IN SECTION 133.F.1 THE PEAK TIME PERIOD IS WEEKDAY 3 PM - 5 PM AND THE MAXIMUM REQUIRED PARKING = 614 SPACES

H. PROPOSED PARKING PROVIDED

1. ON-SITE PARKING PROVIDED:

LEVEL	SPACES	HANDICAP SPACES
UPPER GROUND FLOOR:	0 SPACES	0 SPACES
LOWER GROUND FLOOR:	54 SPACES	75 SPACES & 3 HANDICAP VAN SPACES
P-1:	117 SPACES & 3 HANDICAP SPACES	
P-2:	114 SPACES & 3 HANDICAP SPACES	
P-3:	114 SPACES & 3 HANDICAP SPACES	
P-4:	114 SPACES & 3 HANDICAP SPACES	
P-5:	114 SPACES & 3 HANDICAP SPACES	
P-6:	4 SPACES	
TOTAL:	724 SPACES + 15 STD. HANDICAP SPACES + 3 HANDICAP VAN SPACES	
TOTAL:	742 SPACES	

2. TOTAL PARKING: TOTAL SHARED PARKING SPACES REQUIRED: = 614 SPACES
TOTAL SPACES PROVIDED: = 742 SPACES PROVIDED

I. SETBACK PROVISIONS (PARAGRAPH 10): NO STRUCTURE SETBACK IS ESTABLISHED FOR THE WINOPIN CIRCLE RIGHT-OF-WAY. HOWEVER, STRUCTURES MAY BE CONSTRUCTED AT ANY LOCATION WITHIN SUCH SETBACK AREA IF SUCH CONSTRUCTION IS IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD. EXCEPT AS RESTRICTED IN THE FDP PARAGRAPH 6-C, BUILDING AND OTHER STRUCTURES MAY BE LOCATED AT ANY LOCATION WITHIN COMMERCIAL LAND USE AREAS. ALL STRUCTURES MUST BE DEVELOPED IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

J. HEIGHT LIMITATIONS (PARAGRAPH 8): COMMERCIAL AREAS - NO HEIGHT LIMITATION IS IMPOSED UPON STRUCTURES CONSTRUCTED WITHIN THESE FINAL DEVELOPMENT PHASES PROVIDED IMPROVEMENTS THEREON ARE CONSTRUCTED IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD. SEE SHEET 4 FOR BUILDING HEIGHT

K. COVERAGE REQUIREMENTS (PARAGRAPH 12): NO COVERAGE REQUIREMENT IS IMPOSED UPON LAND WITHIN THESE FINAL DEVELOPMENT PLAN PHASES DEVOTED TO COMMERCIAL/APARTMENT LAND USES, EXCEPT IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

LOT COVERAGE: 41,818 / 48,341 = 86.7%

F. PRIVATE SCHOOL PARKING REQUIREMENTS:

1. PROPOSED SCHOOL: 190 STUDENTS (10,981 SF)

2. SCHOOL PARKING REQUIREMENTS: ONE PARKING SPACE SHALL BE PROVIDED FOR EVERY THREE STUDENTS

NUMBER OF PARKING SPACES REQUIRED (1 SPACE PER 3 STUDENTS) 50 STUDENTS / 3 = 17 SPACES

PROFESSIONAL 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 Maryland, License No. 12475, Expiration Date: May 26, 2018.

Date: 6/10/17
Carl K. Gutschick
Professional Engineer
Maryland Reg. No. 12475

BREAK-DOWN OF GROSS AREA BY FLOOR	LEVEL	USE	AREA
P-5 LEVEL	PARKING	44,803 s.f.	
P-4 LEVEL	PARKING	44,803 s.f.	
P-3 LEVEL	PARKING	44,803 s.f.	
P-2 LEVEL	PARKING	44,803 s.f.	
P-1 LEVEL	PARKING	44,803 s.f.	
LOWER GROUND	PARKING, RETAIL & RES. LOBBY	43,386 s.f.	
UPPER GROUND	PARKING, RETAIL, & RESIDENTIAL	31,021 s.f.	
L1	OFFICE & OFFICE LOBBY	33,715 s.f.	
L2 R/ L2 O	RESIDENTIAL	11,254 s.f.	
L3 R/ L3 O	OFFICE, FITNESS & RESIDENTIAL	23,817 s.f.	
L4 R/ L4 O	OFFICE/RESIDENTIAL	35,754 s.f.	
L5 R	RESIDENTIAL	19,056 s.f.	
L6 R/ L6 O	OFFICE/RESIDENTIAL	35,754 s.f.	
L7 R/ L7 O	OFFICE/RESIDENTIAL	35,754 s.f.	
L8 R/ L8 O	OFFICE/RESIDENTIAL	35,754 s.f.	
L9 R	RESIDENTIAL	19,056 s.f.	
L10 R/ L10 O	OFFICE / RESIDENTIAL	35,754 s.f.	
R PENT/ L1 O	OFFICE / RESIDENTIAL PENTHOUSE	2,050 s.f.	
O PENT	OFFICE PENTHOUSE	1,035 s.f.	
TOTAL		653,264 s.f.	

ADDRESS CHART

STREET ADDRESS	ASBUILT SHEET 1 OF 4
10175 LITTLE PATUXENT PARKWAY (Commercial)	
10201 WINOPIN CIRCLE (Residential)	

PROJECT NAME	SECTION/AREA	PARCEL
COLUMBIA TOWN CENTER	SECTION 7 AREA 6	C-3
PLAT	TAX MAP	ELEC. DIST.
18353 & 18354	NT	No. 5
GRID	CENSUS TRACT	
20	6254.02	
WATER CODE: E51	SEWER CODE: 9521000	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: [Signature] Date: 3-4-16

Chief, Division of Land Development: [Signature] Date: 3-4-16

Chief, Development Engineering Division: [Signature] Date: 2-21-16

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 1/21/2014

GLWGUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 230 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886

TEL: 301-421-4024 FAX: 301-421-4168

DATE	REVISION	BY	APPR.
00/19/19	Parking Requirements Updated	Wsj	DDs
02/2016	Parking Requirements Updated	JH	DDs
02/2016	BUILDING TOWER & BUILDING ENTRANCES REVISED, FTP III-A-1 CRITERIA ANALYSIS UPDATED		
09/2014	BUILDING TOWER & BUILDING ENTRANCES REVISED, FTP III-A-1 CRITERIA ANALYSIS UPDATED		
06/2014	BUILDING TOWER & BUILDING ENTRANCES REVISED, FTP III-A-1 CRITERIA ANALYSIS UPDATED		

ASBUILTS

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12475, EXPIRATION DATE: MAY 26, 2018.

PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS, LLC
10211 WINOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID CIOSTELLO
410-740-9500

ELECTION DISTRICT No. 5

REVISOR COVER SHEET

PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING

COLUMBIA TOWN CENTER

SECTION 7 AREA 6

PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
JUN, 2017 FEB., 2016	30 - 20	1 OF 19

LEGEND

- 600 --- EXISTING CONTOUR
- 600 --- PROPOSED CONTOUR
- 600 --- PROPOSED SPOT ELEV. (1" HP/HGT FT)
- 600 --- LIMIT OF GRADING DISTURBANCE / LIMIT OF SUBMISSION
- 600 --- EXISTING UTILITY/LIGHT POLE
- 600 --- PROPOSED LIGHT POLE
- 600 --- WATER HOUSE CONN. (PRIVATE)
- 600 --- WATER LINE (PUBLIC)
- 600 --- FIRE HYDRANT
- 600 --- SEWER HOUSE CONN. (PRIVATE)
- 600 --- SEWER MAIN (PUBLIC)
- 600 --- EXISTING STORM DRAIN
- 600 --- PROPOSED STORM DRAIN STRUCTURE (# INLET LABEL)
- 600 --- STORM DRAIN PIPE
- 600 --- PROPOSED UNENCASED TELEPHONE CONDUIT (BY OTHERS)
- 600 --- EXISTING CURB & GUTTER
- 600 --- PROPOSED CURB & GUTTER
- 600 --- FLUSH CURB / DEPRESSION CURB
- 600 --- PROPOSED CURB TRANSITION
- 600 --- PATRON ENTRANCE
- 600 --- CONCRETE SIDEWALK
- 600 --- EX. EASEMENTS
- 600 --- UNDERGROUND BUILDING DIMENSIONS (GARAGE LEVEL, P-3)
- 600 --- FIRST FLOOR RETAIL AREA
- 600 --- BUILDING TOWER
- 600 --- BUILDING AT GROUND LEVEL
- 600 --- LIMITS OF UNDERGROUND GARAGE
- 600 --- PROPOSED OFF SITE PAVING (P-5 SECTION)

PARCEL C-3

PROPERTY LINE TABLE

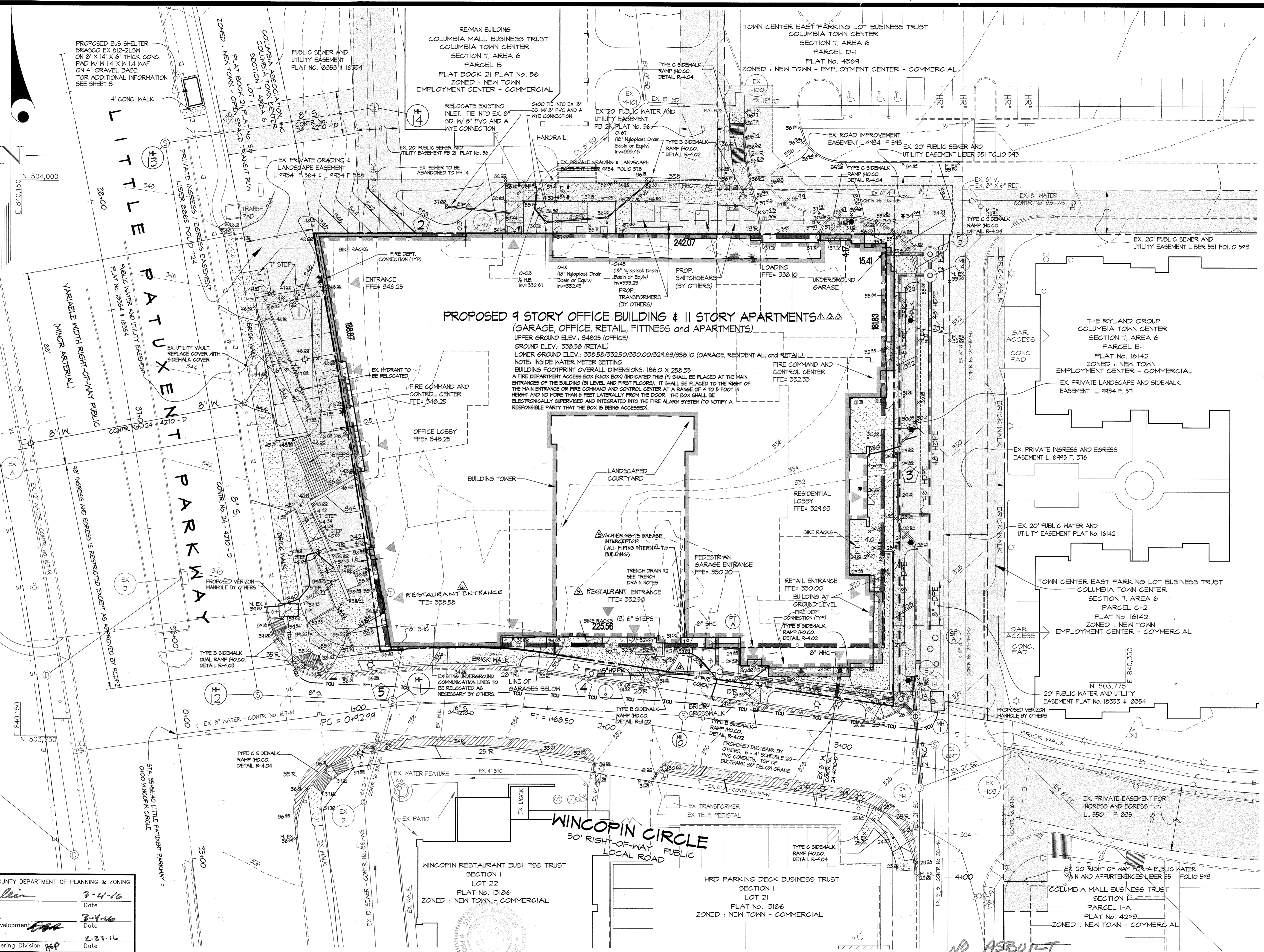
PT. NO.	BEARING, DIST. or RAD. LENGTH
1	R = 3415.72', L = 141.13'
2	N. 90° 00' 00" E. 262.43'
3	S. 00° 00' 00" E. 212.52'
4	N. 81° 24' 37" W. 174.74'
5	R = 244.81', L = 74.51'

- HANDICAP ACCESSIBILITY NOTES:**
1. MAXIMUM SIDEWALK CROSS SLOPE IS 2%.
 2. A 5' X 5' MINIMUM LEVEL (2%) LANDING IS REQUIRED AT THE TOP AND BOTTOM OF ALL RAMP. RAMP SLOPES GREATER THAN 5%.
 3. MAXIMUM SLOPE IN ANY DIRECTION OF THE HANDICAP PARKING IS 2%.
 4. DETECTABLE WARNINGS ARE REQUIRED ON ALL SIDEWALK RAMP IN THE COUNTY RIGHT-OF-WAY.
 5. DETECTABLE WARNINGS ARE REQUIRED ON ALL SIDEWALKS WITHOUT CURB RAMP THAT TERMINATE AT FLUSH CURB FOR ROADWAYS.

NOTE: A MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE DEVELOPER AND HOWARD COUNTY DEPT. BUREAU OF HIGHWAYS REGARDING THE MAINTENANCE OF THE BRICK SIDEWALK AND CROSSWALK LOCATED IN THE COUNTY RIGHT-OF-WAY WILL BE SIGNED AS PART OF THE DEVELOPERS AGREEMENT.

TRENCH DRAIN NOTES:

DESIGNER: ZURN 2874-12 TRENCH DRAIN (OR EQUIV.) 21 LF USE #1203P AND #1204P ON EITHER SIDE AND DRAIN TO CENTER. USE 6" BOTTOM OUTLET AND TIE INTO FT-A. INV. OF 6" PVC @ 12" HOPE = 323.70. USE #120 GRATE.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Valerie J. Jaffe 3-4-16
Director Date

Kevin Schuler 3-4-16
Chief, Division of Land Development Date

Chris Clark 2-23-16
Chief, Development Engineering Division Date

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 1/2/2014

GLWGUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
BURTNSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT. 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
02/19/10	Retail Use Changed to Restaurant	gt	DD
02/19/10	Grease Interceptor added	gt	DD
02/19/10	no changes	gt	DD
02/20/16	TOWER LAYOUT REVISED		
09/20/14	TOWER LAYOUT REVISED	02/20/16	
06/20/14	TOWER LAYOUT REVISED		

PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTOR: LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12975. EXPIRATION DATE: MAY 25, 2016.

REVISED SITE PLAN INFORMATION

PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING

COLUMBIA TOWN CENTER

SECTION 7 AREA 6

PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1

HOWARD COUNTY, MARYLAND

SCALE 1"=20'

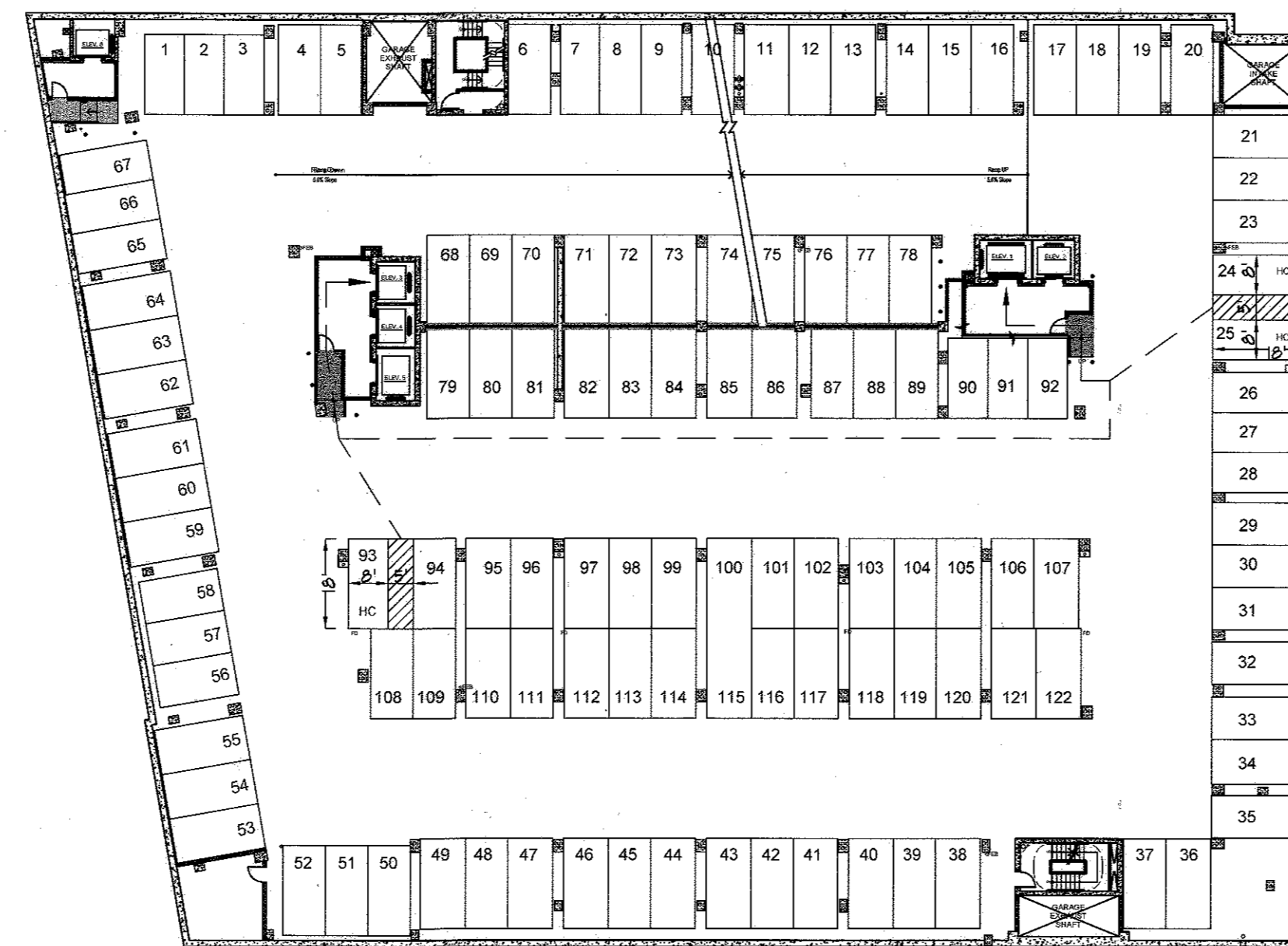
ZONING NT

G. L. W. FILE No. 04052

DATE FEB, 2016

TAX MAP - GRID 30 - 20

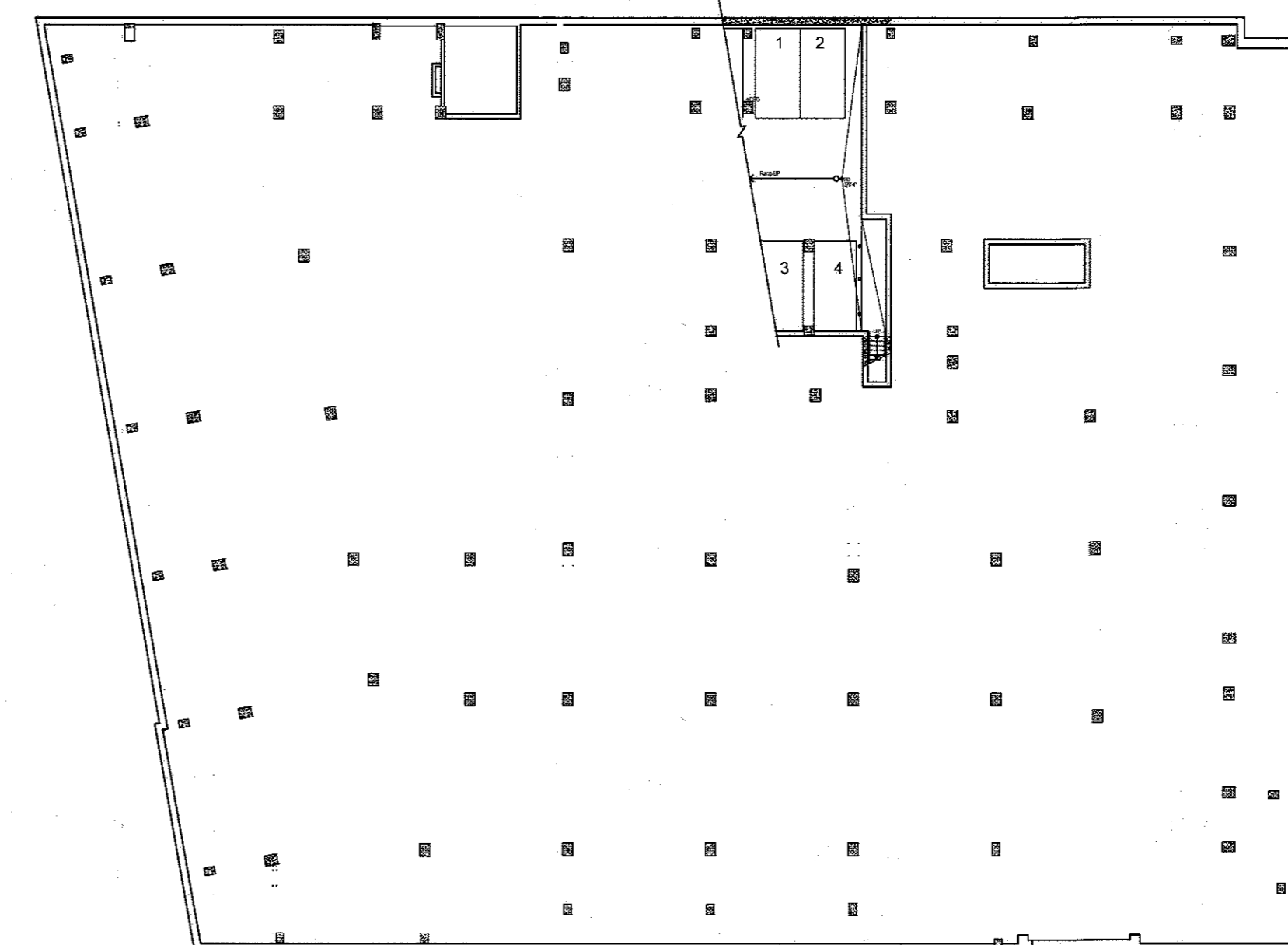
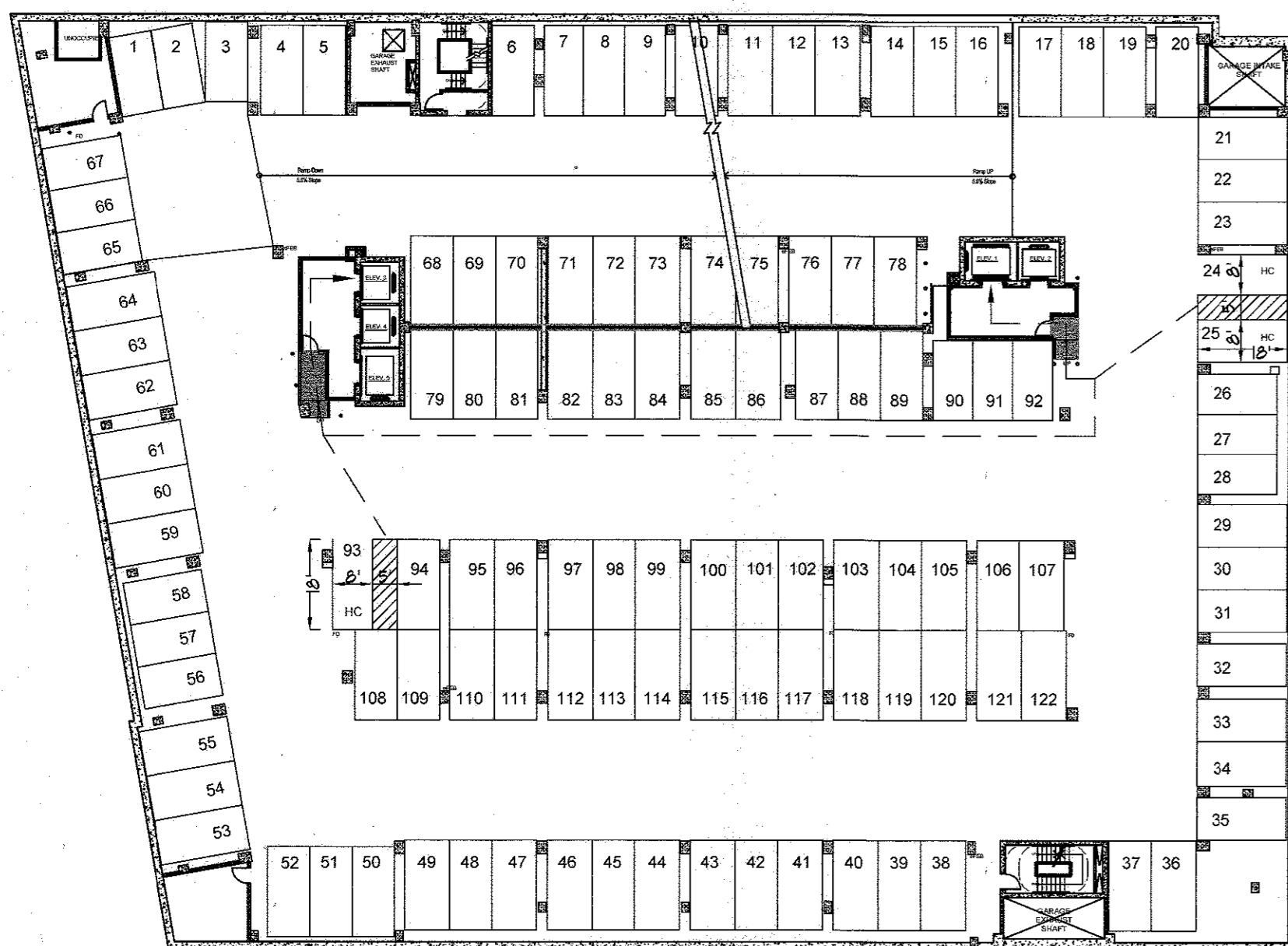
SHEET 2 OF 19



▲ PARKING LEVEL 1 - 117 SPACES + 3 HANDICAP SPACES = 120 SPACES
SCALE: 1" = 30'

▲ PARKING LEVEL 2 - 119 SPACES + 3 HANDICAP SPACES = 122 SPACES
SCALE: 1" = 30'

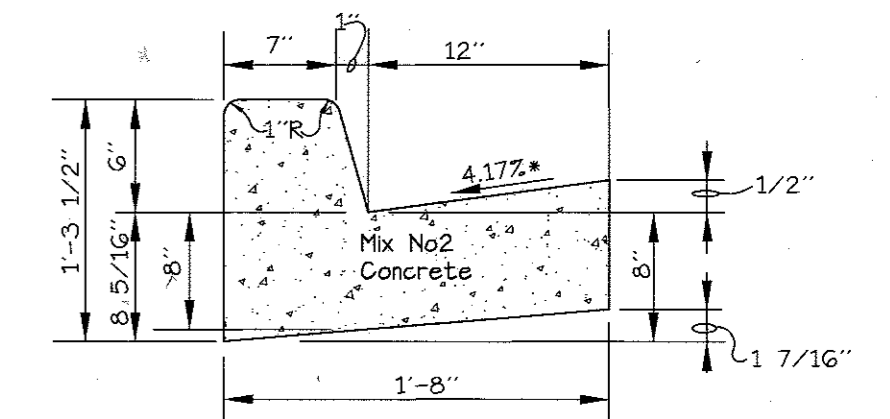
▲ PARKING LEVEL 3 - 119 SPACES + 3 HANDICAP SPACES = 122 SPACES
SCALE: 1" = 30'



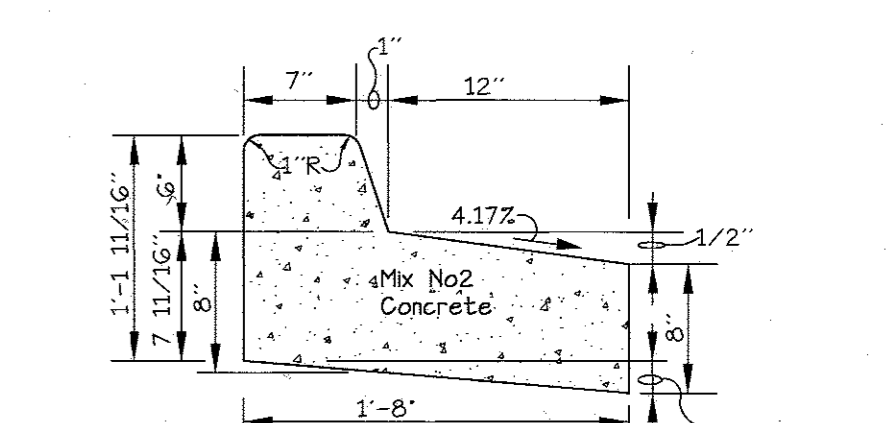
▲ PARKING LEVEL 4 - 119 SPACES + 3 HANDICAP SPACES = 122 SPACES
SCALE: 1" = 30'

▲ PARKING LEVEL 5 - 119 SPACES + 3 HANDICAP SPACES = 122 SPACES
SCALE: 1" = 30'

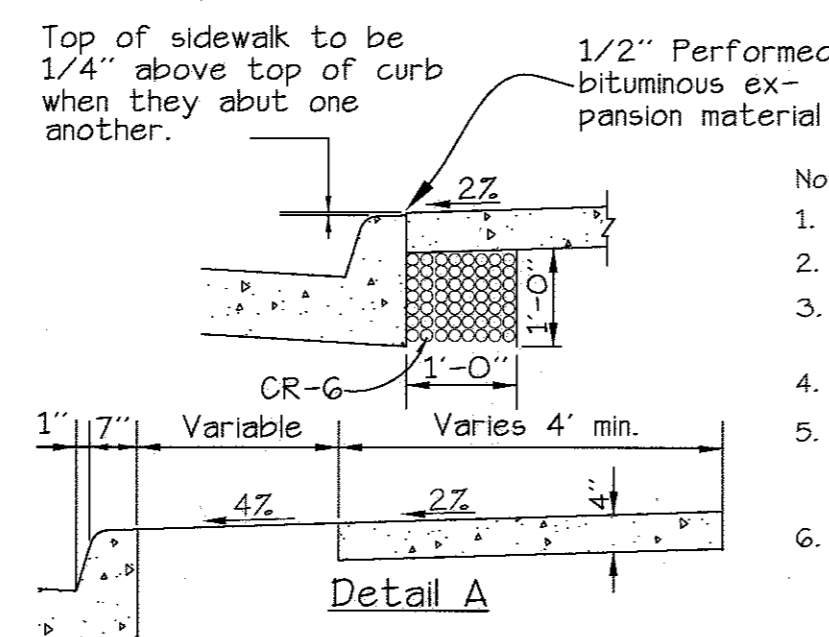
▲ PARKING LEVEL 6 - 4 SPACES
SCALE: 1" = 30'



Standard 6" Combination Curb + Gutter
N.T.S.

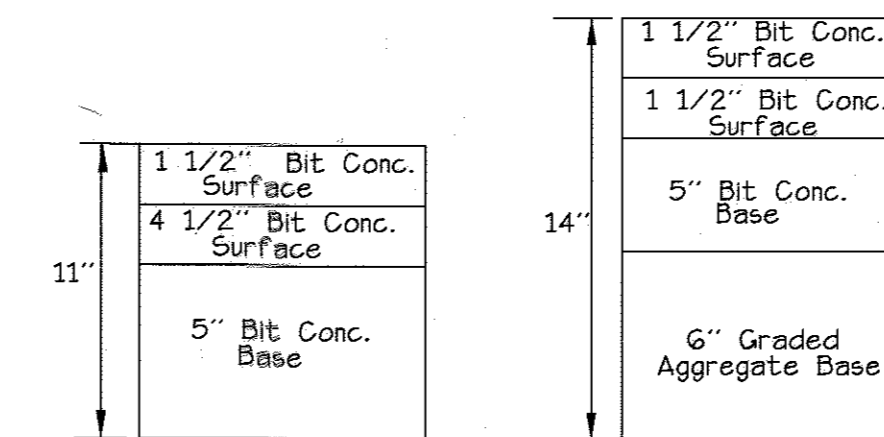


Reverse 6" Combination Curb + Gutter
N.T.S.

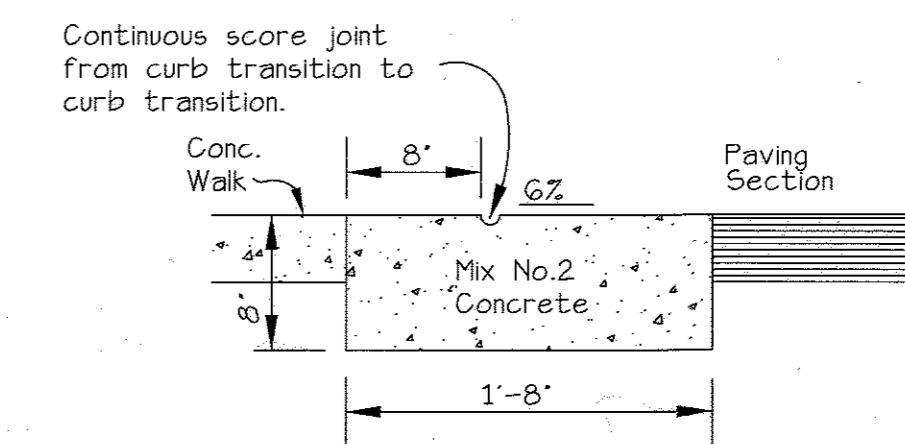


Detail A

- Notes:
- Sidewalk to be scribed scribed in 5' maximum squares.
 - Expansion joints across the sidewalk not to be more than 15' apart.
 - 1/2" performed bituminous expansion material in expansion joints to be kept 1/4" below surface of sidewalk.
 - Concrete to be mix No.2
 - When sidewalk abuts curb, walk shall be 1/4" above curb with performed bituminous expansion material between sidewalk and curb and resting on a compacted crushed stone base. See detail A this sheet.
 - On longitudinal sidewalk grades of 5% or greater, a concrete header, 6" thick and 6" deep below the normal 4" sidewalk thickness shall be constructed for the full width of the sidewalk at intervals of 48'. The headers shall be placed at expansion joint locations and shall be monolithic with the sidewalk.



Full Depth Bituminous Option
P-5 HEAVY DUTY PAVEMENT DETAIL
N.T.S.



Flush Curb
N.T.S.

NOTE: SEE SHEET 5 FOR REMAINING PARKING LEVELS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director: *Valerie J. Joffe* Date: 3-4-16

Chief, Division of Land Development: *Robt. S. ...* Date: 3-4-16

Chief, Development Engineering Division: *HP* Date: 2-23-16

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE: 1/2/2014

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4165

DATE	REVISION
02/2016	GARAGE LAYOUT REVISED
03/2014	GARAGE LAYOUT REVISED
06/2014	GARAGE LAYOUT REVISED

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12976, EXPIRATION DATE: MAY 26, 2016.

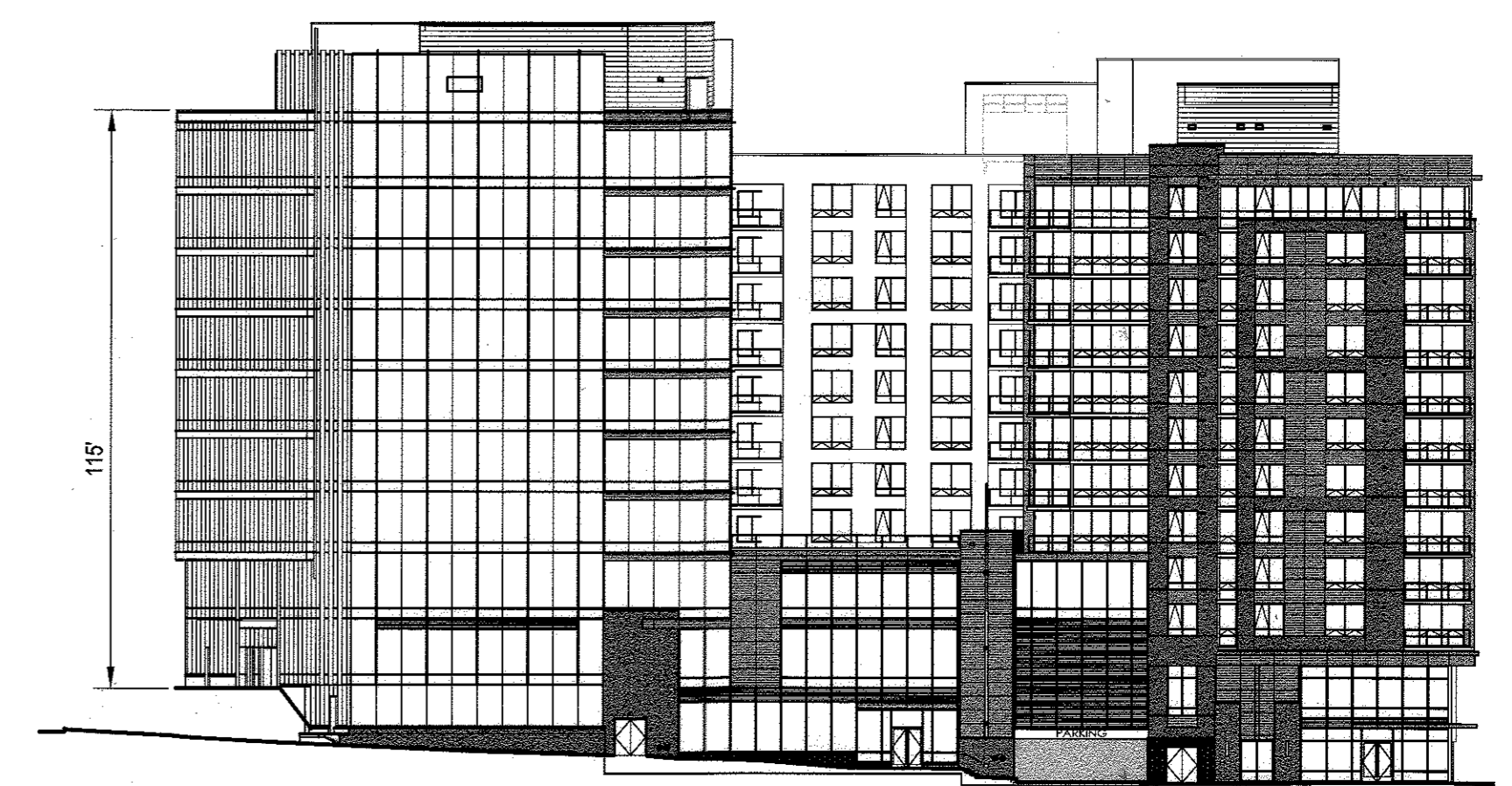
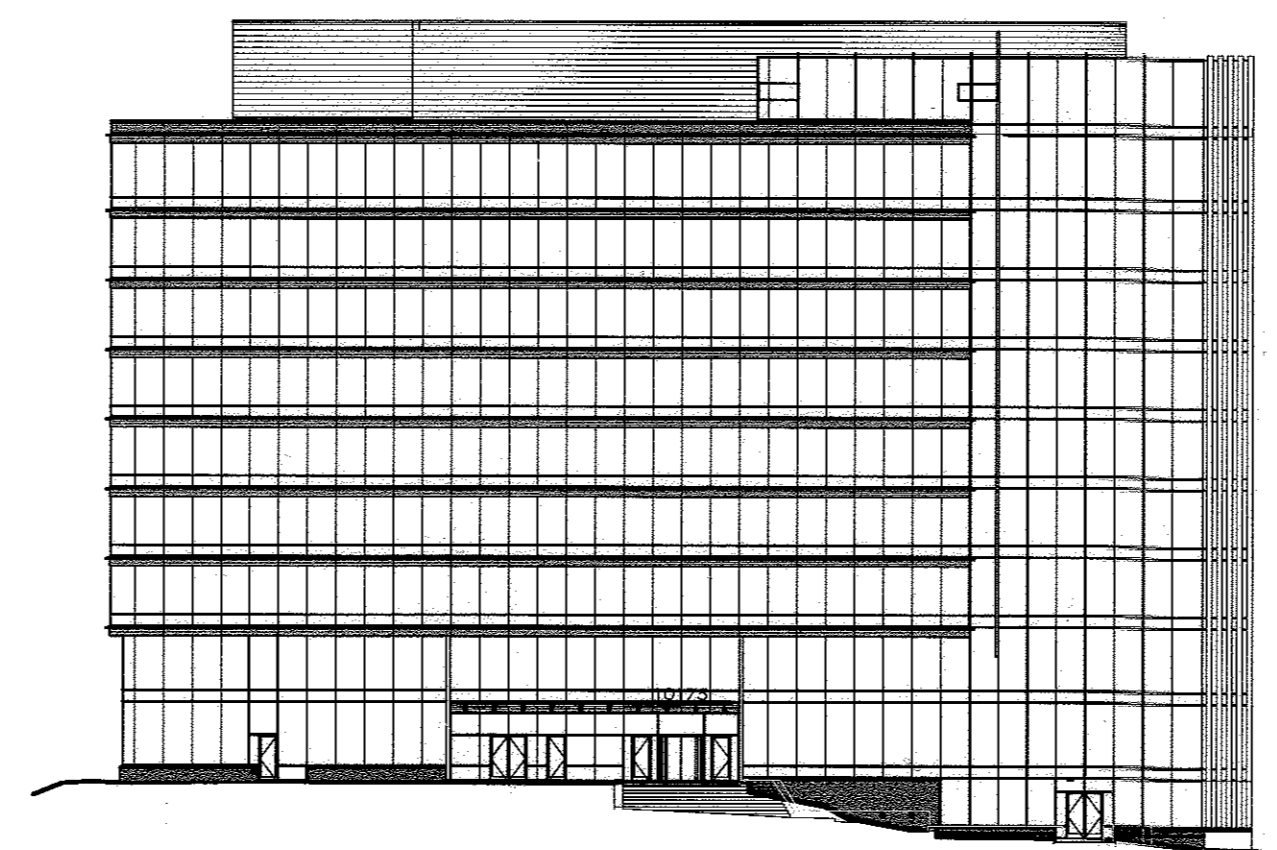
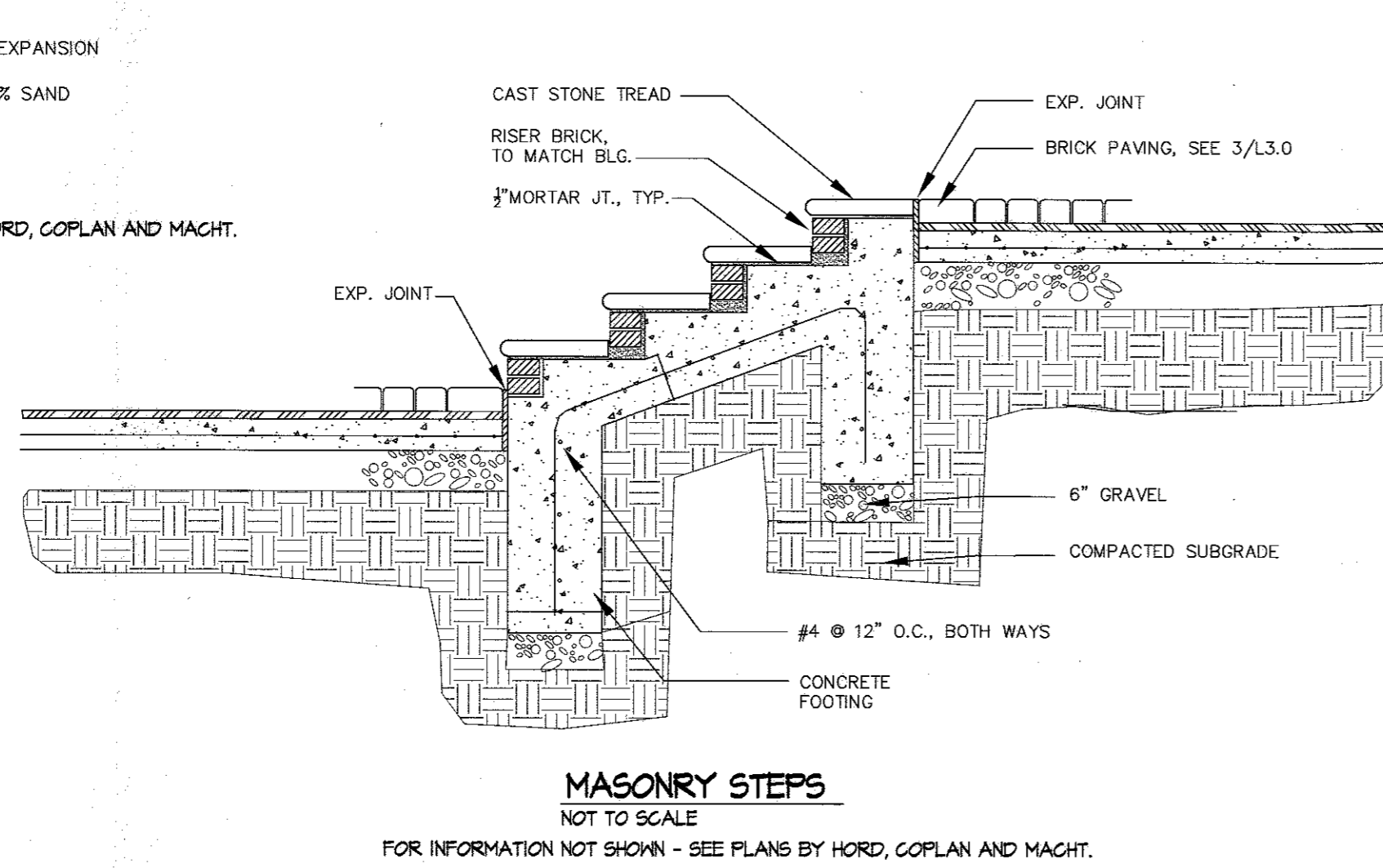
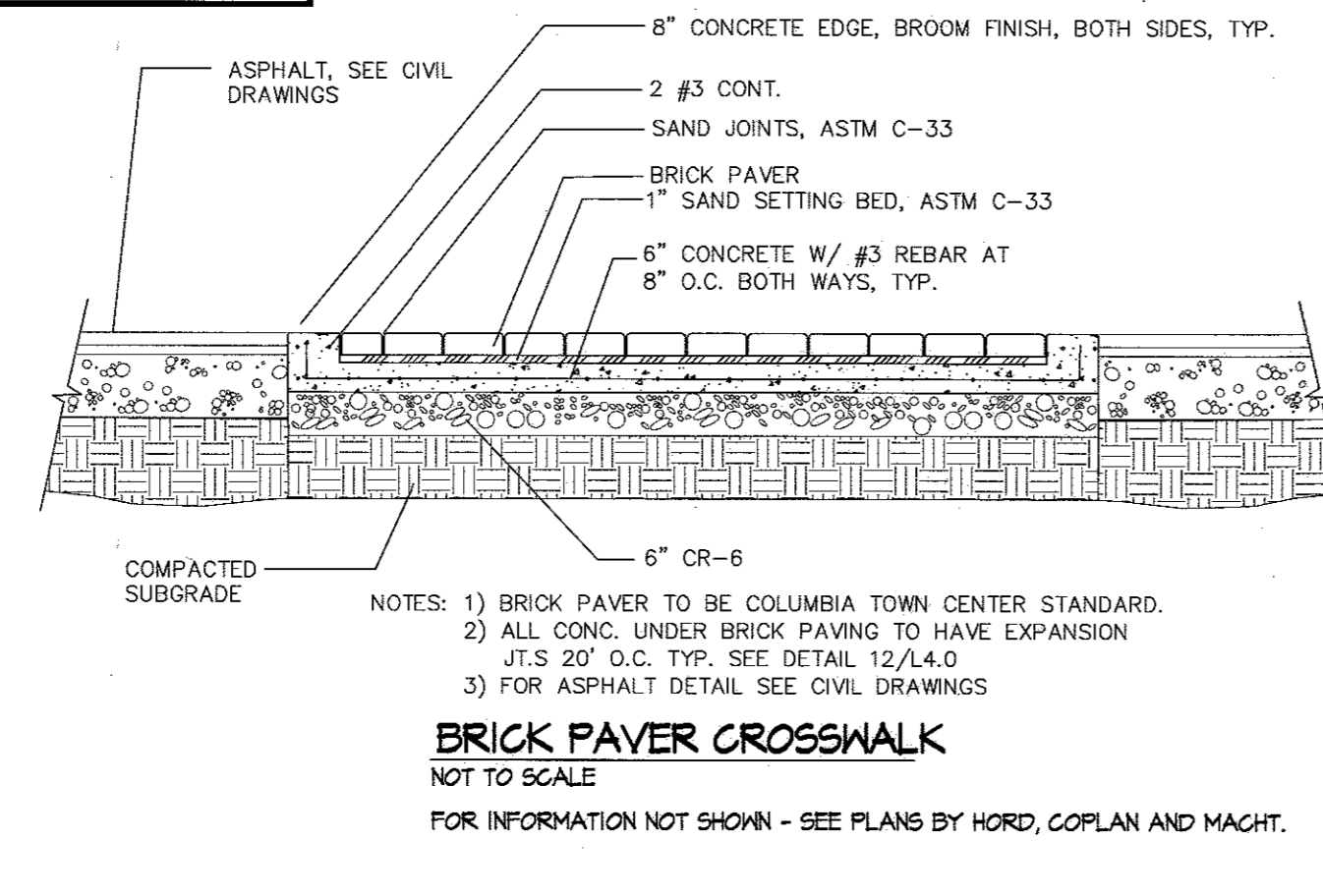
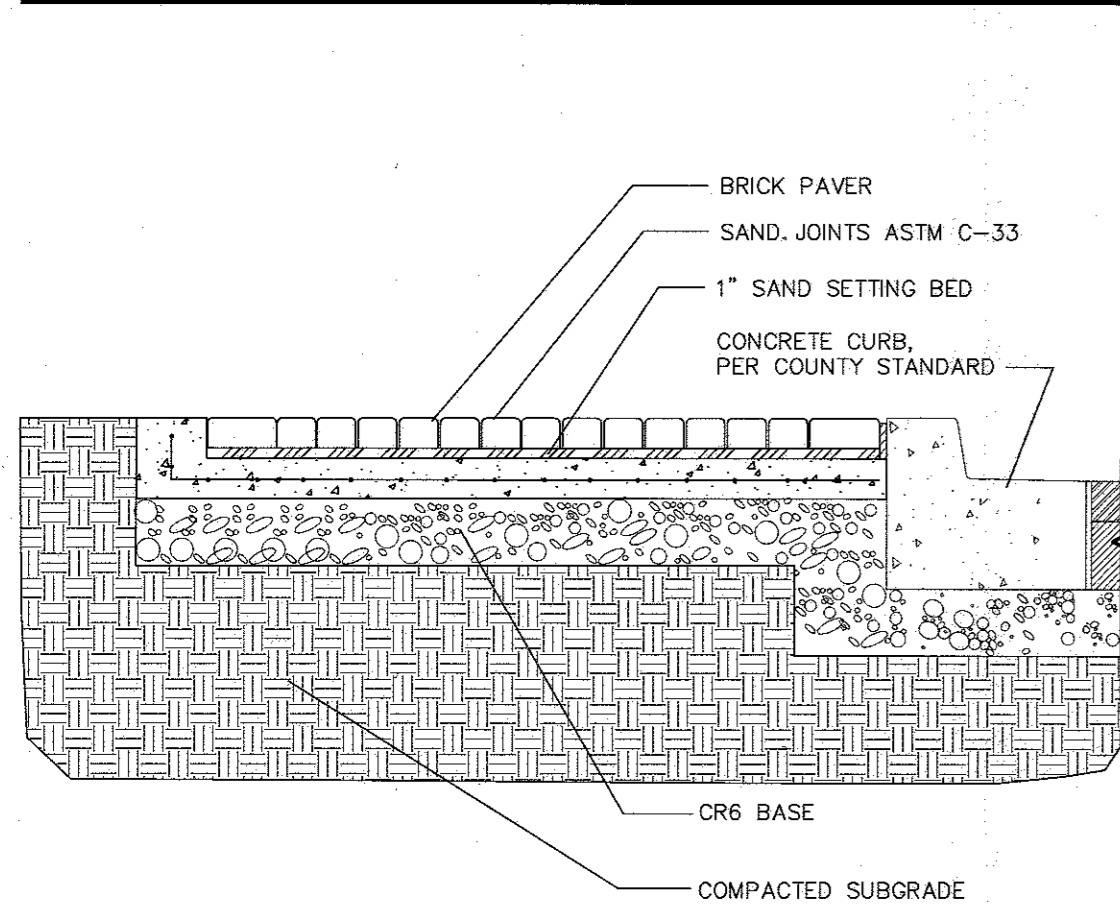
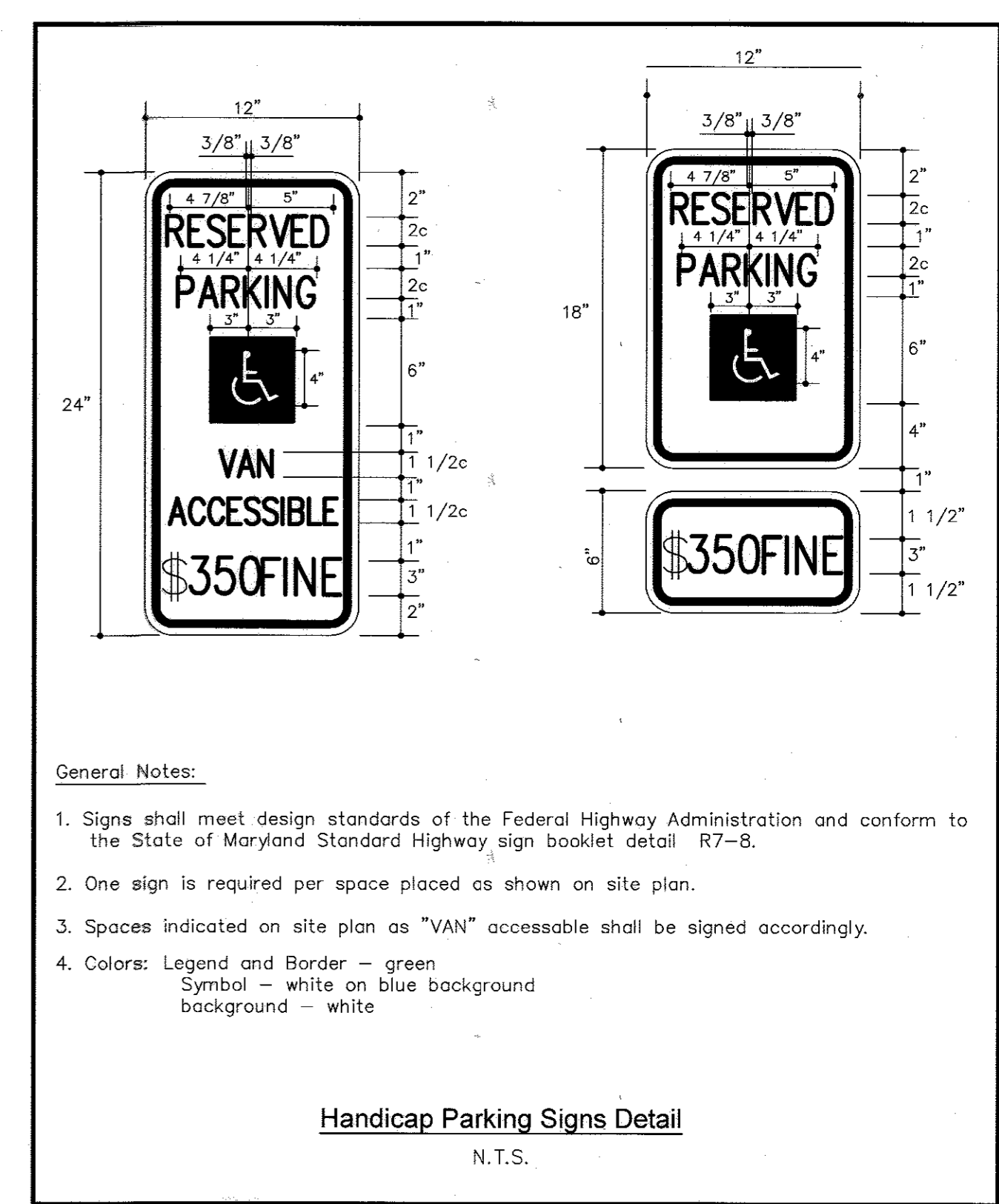
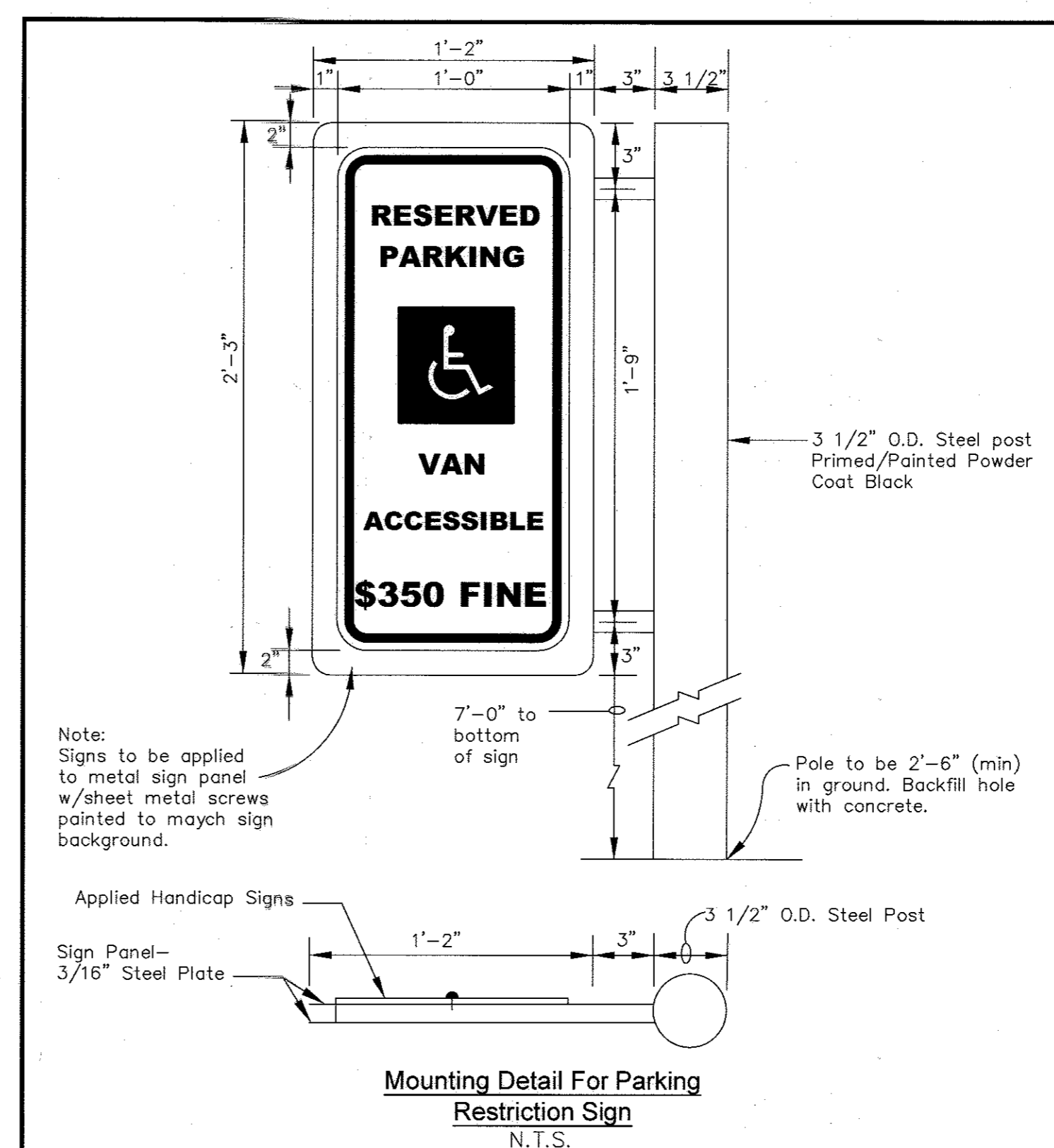
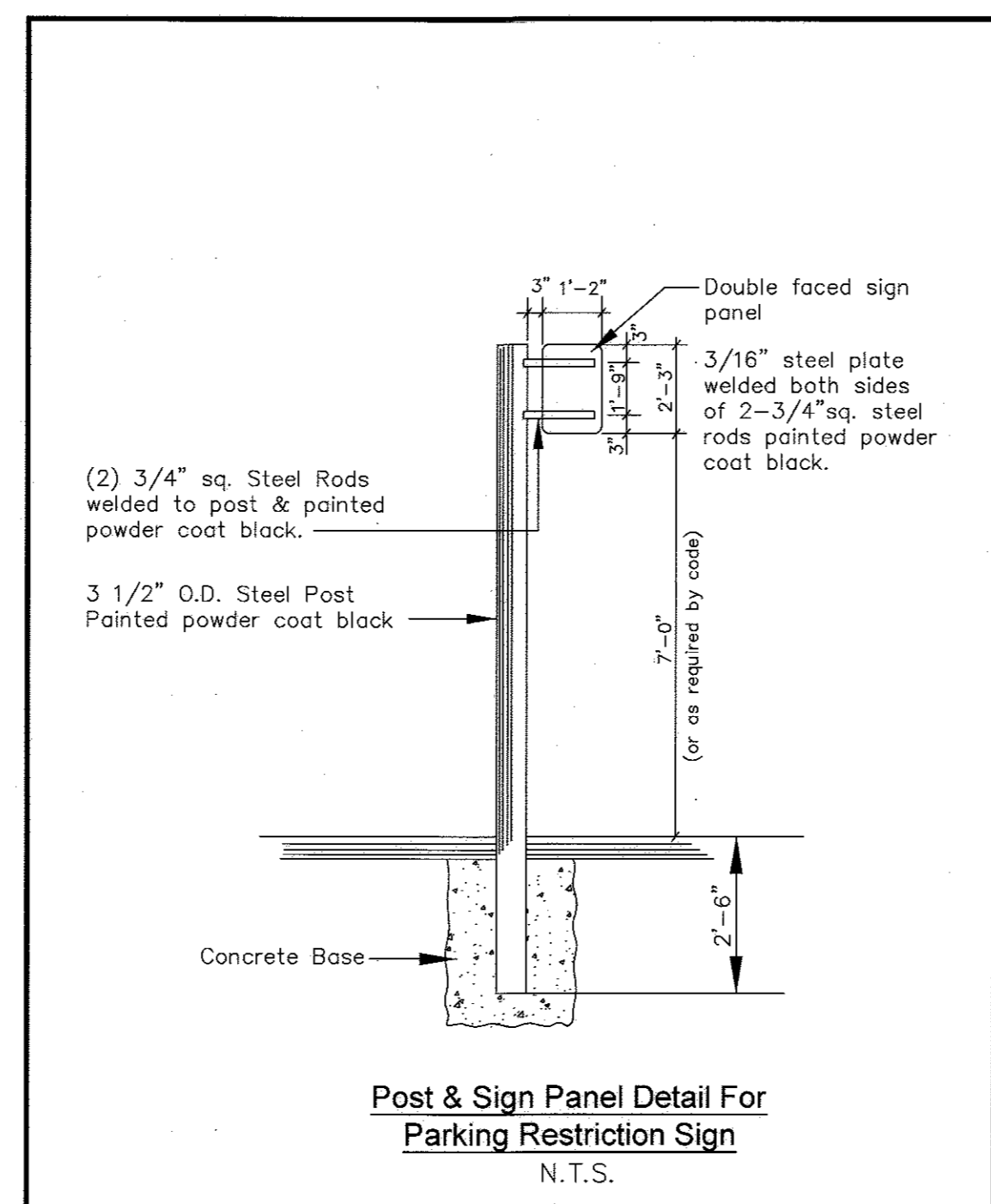
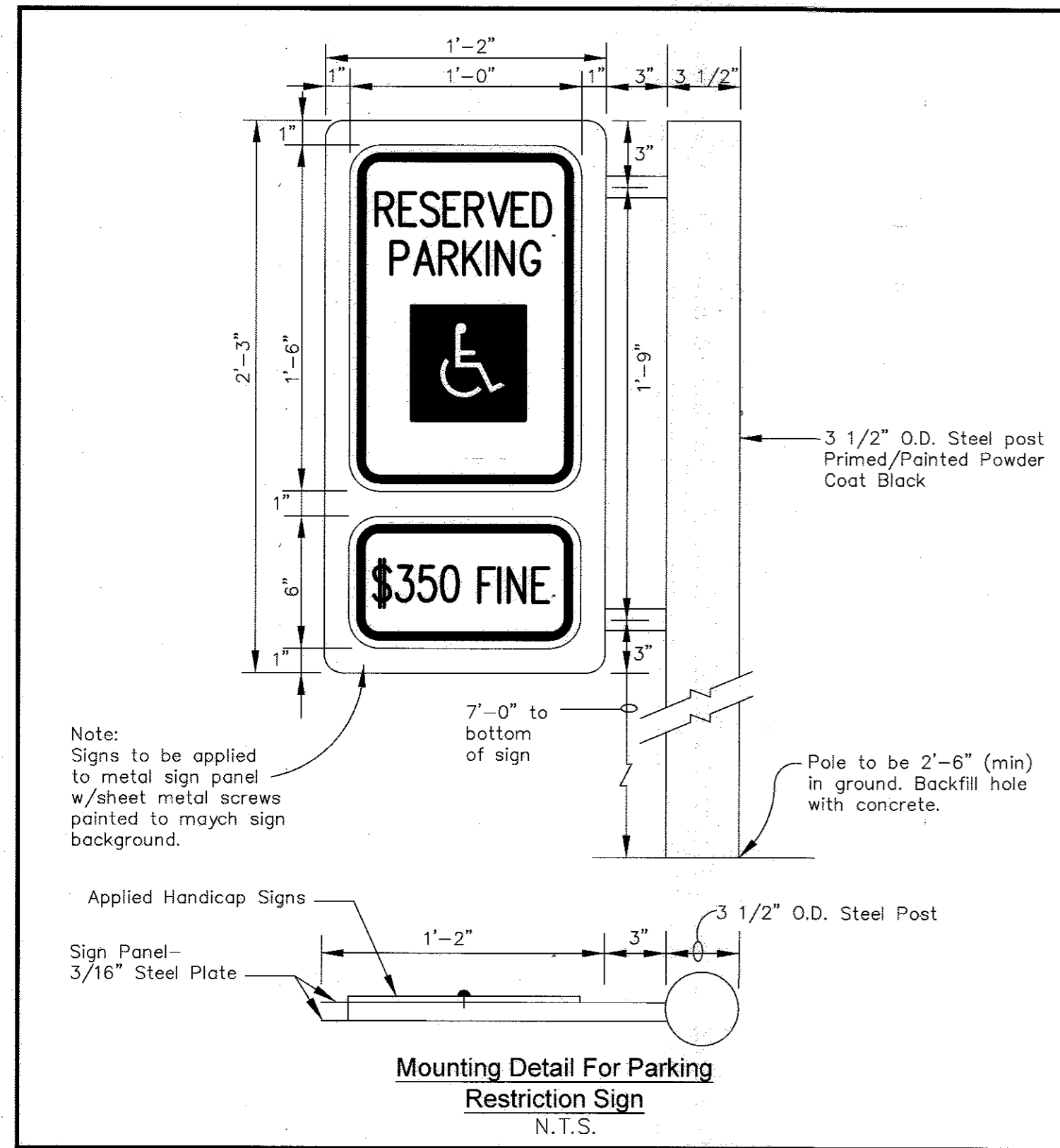
PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

REVISED PARKING GARAGE DETAILS AND SITE DETAILS

PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB., 2016	30 - 20	3 OF 19

NO ASBUILT INFORMATION 06/2/2017



SCHEMATIC WEST BUILDING ELEVATION
NOT TO SCALE

SCHEMATIC SOUTH BUILDING ELEVATION
NOT TO SCALE

NOTE: SEE SHEET 5 FOR NORTH AND EAST BUILDING ELEVATIONS

NO ASBUILT INFORMATION 06/12/2017

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 1/2/2014
 Director: *Valerie J. J...* 3-4-16
 Chief, Division of Land Development: *...* 3-4-16
 Chief, Development Engineering Division: *...* 2-23-16

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1620 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
02/2016	ELEVATIONS REVISED		
05/2014	ELEVATIONS REVISED		
06/2014	TOWER ELEVATIONS & HANDICAP FINES REVISED		

STATE OF MARYLAND
 PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12275, EXPIRATION DATE: MAY 28, 2016.

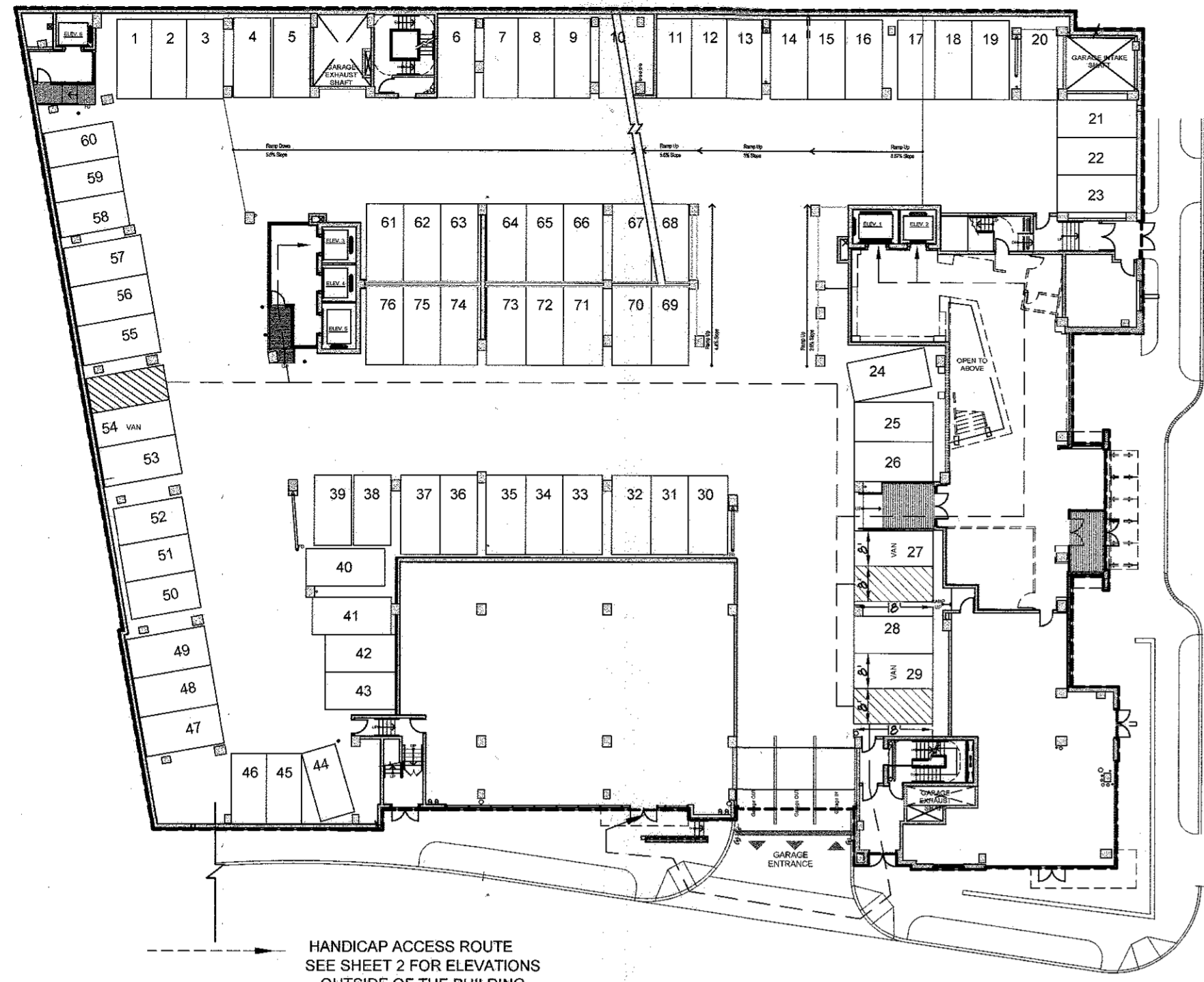
PREPARED FOR AND OWNER PARCEL C-3:
 LPP INVESTORS, LLC
 10211 WINCOPIN CIRCLE
 SUITE 100
 COLUMBIA, MD 21044
 Attn: DAVID COSTELLO
 410-740-9500

REVISED SITE AND HANDICAP ACCESS DETAILS
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
 SECTION 7 AREA 6
 PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
 HOWARD COUNTY, MARYLAND

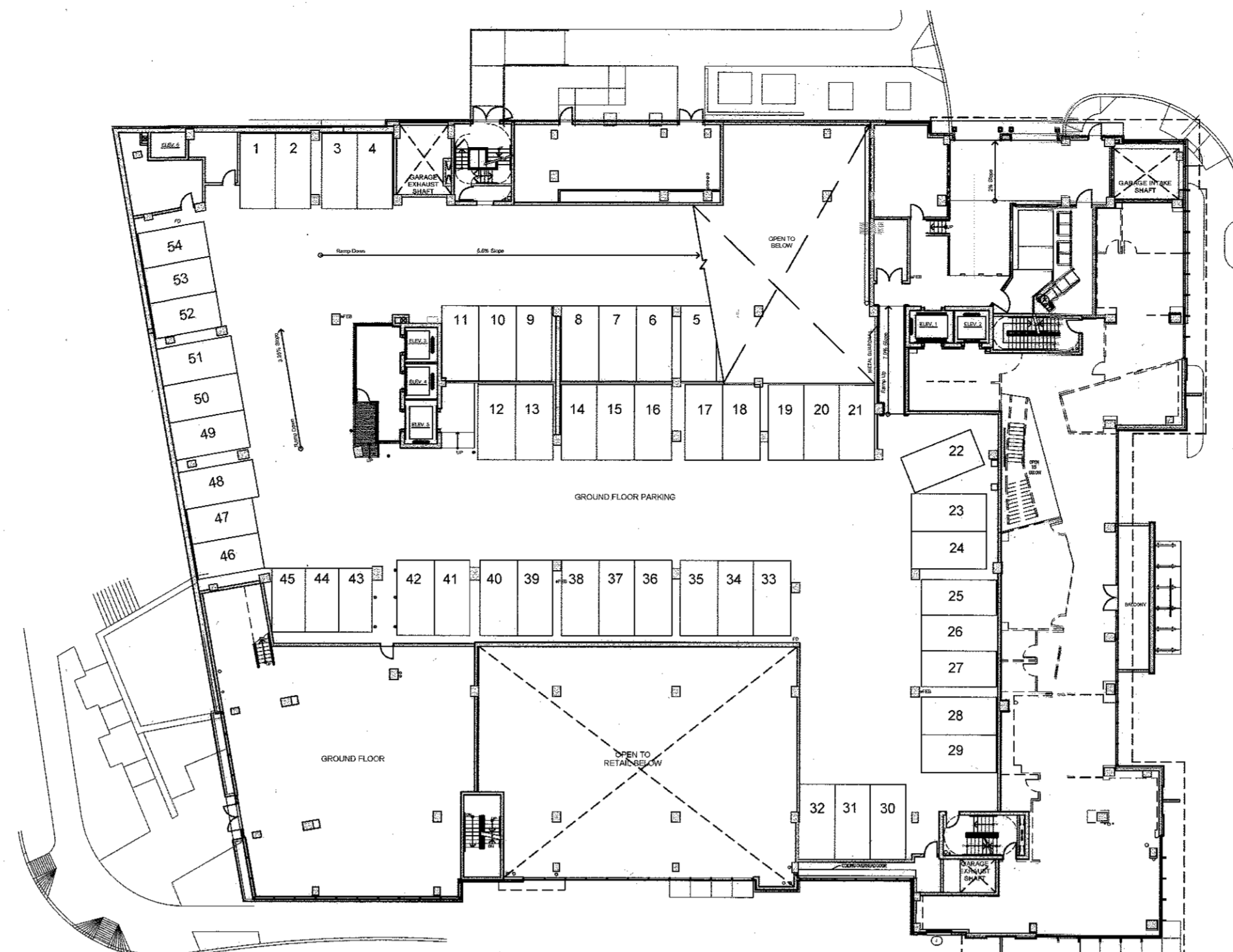
SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB., 2016	30 - 20	4 OF 19

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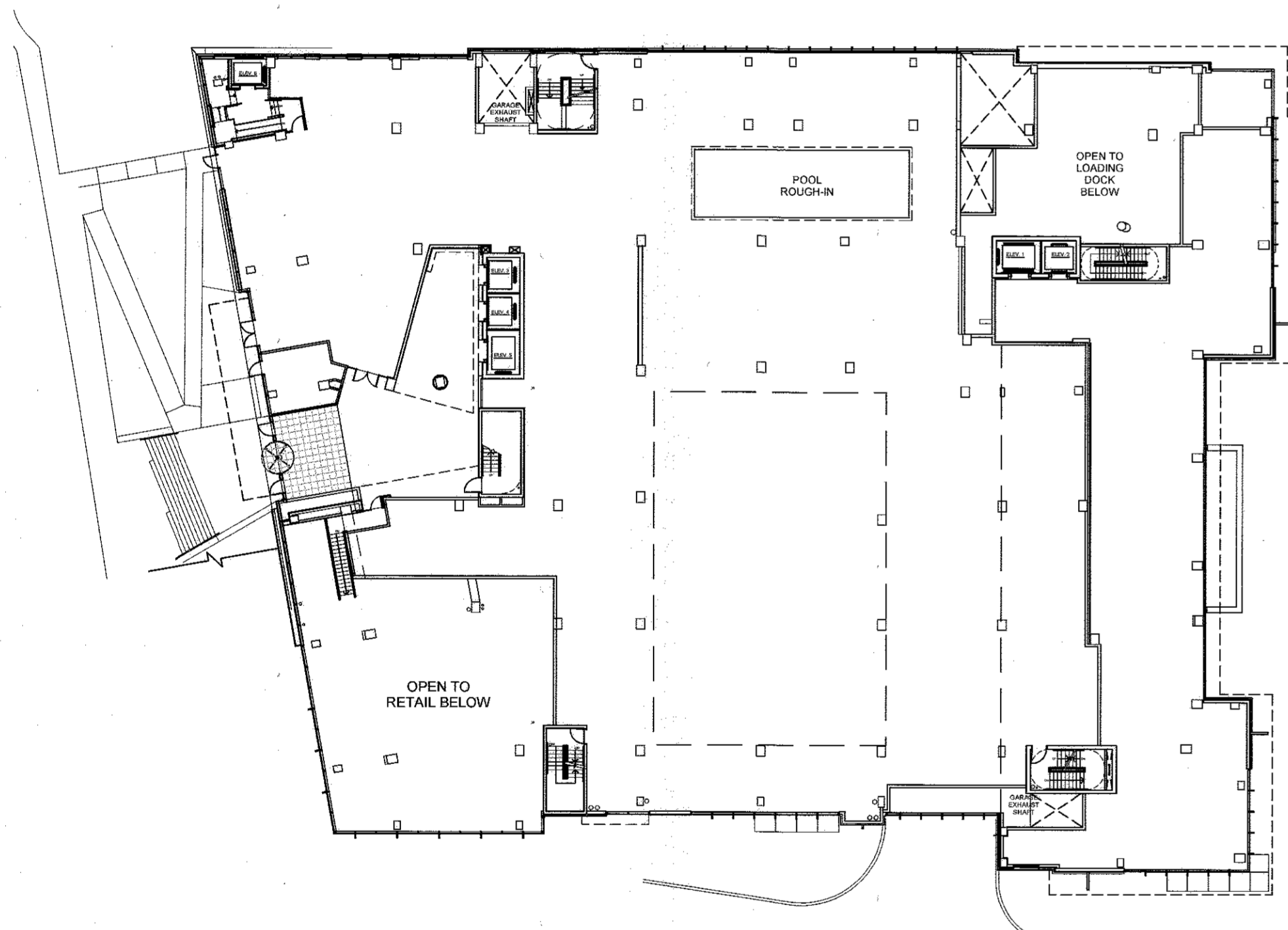
GRP 05-00



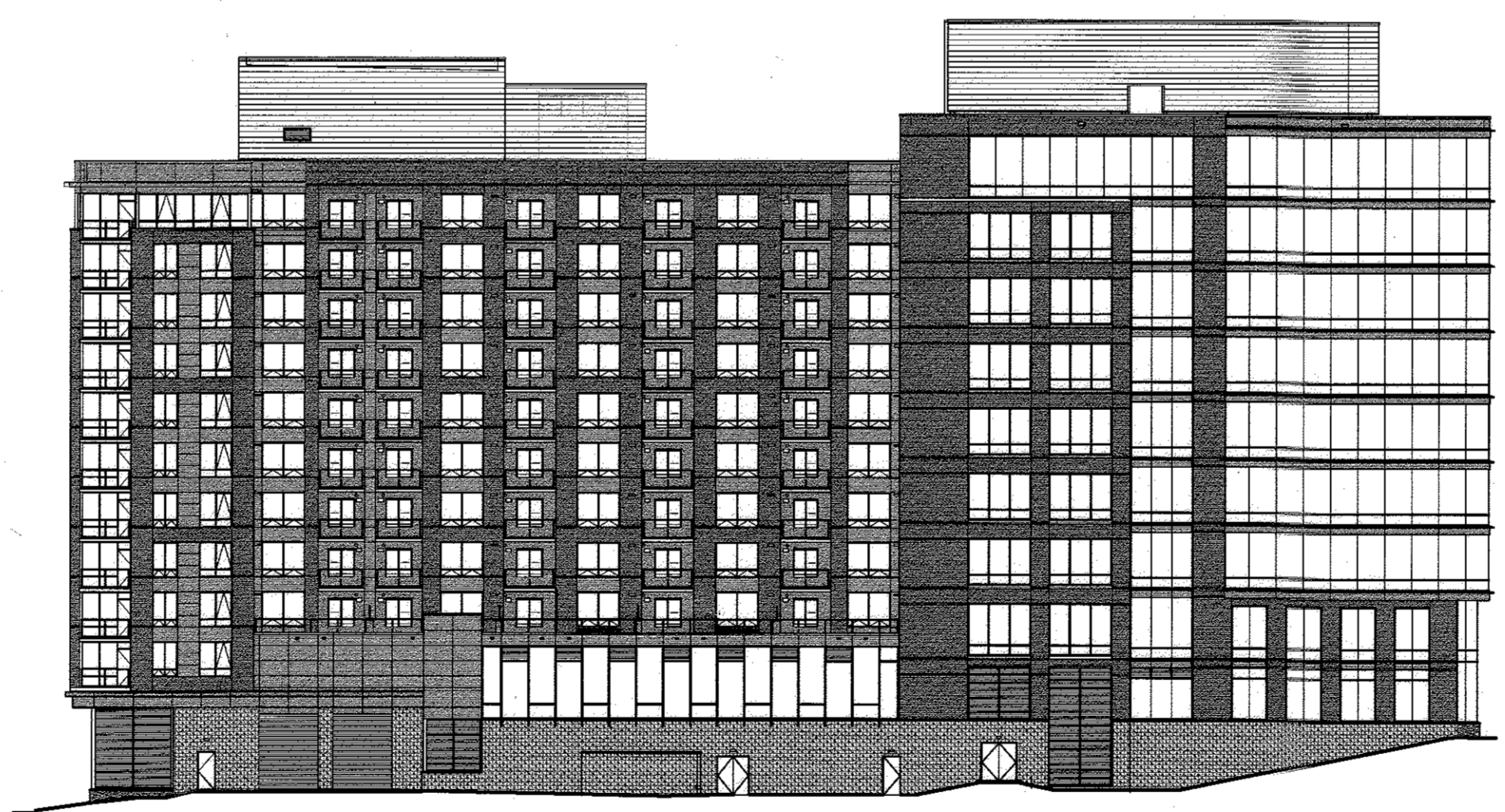
△ LOWER GROUND FLOOR - 73 SPACES + 3 VAN SPACES = 76 SPACES
SCALE: 1" = 30'



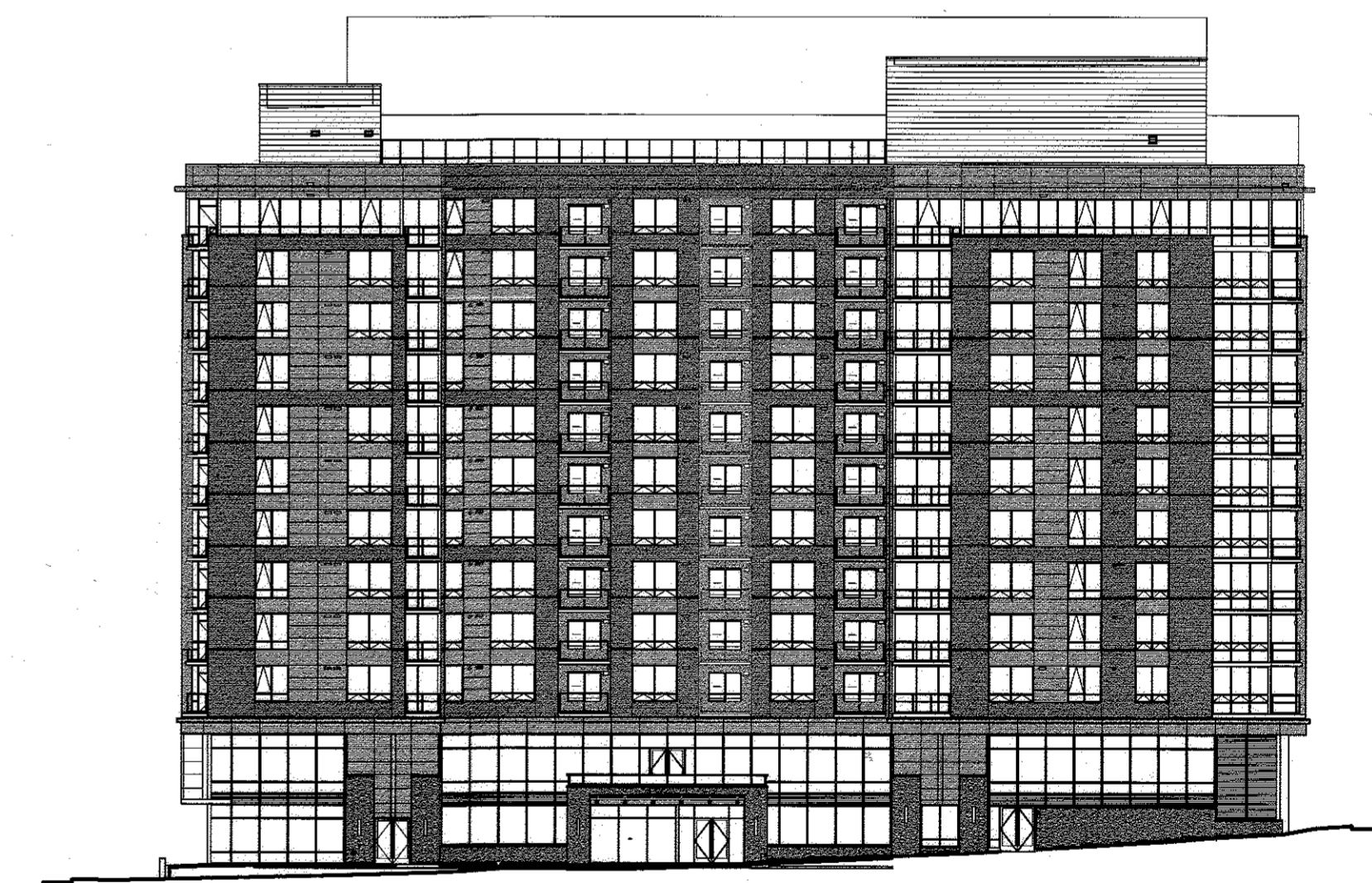
△ GROUND FLOOR - 54 SPACES
SCALE: 1" = 30'



△ UPPER GROUND FLOOR
SCALE: 1" = 30'



△ SCHEMATIC NORTH BUILDING ELEVATION
NOT TO SCALE



△ SCHEMATIC EAST BUILDING ELEVATION
NOT TO SCALE



Gutschick, Little & Weber, P.A.
ATTN: Mike Trappan
3909 National Drive, Suite 250
Bartonsville, MD 20866

April 5, 2005

Subject: Bus Shelter Information

Dealer: Brasco International INC
1000 Mt. Elliot
Detroit, MI 48207
Toll Free 1-800-893-3665 Phone: (313) 393-0393 FAX: (313) 393-0499

Web Address: www.brasco.com
E-mail Address: brasco1@aol.com

Shelter Type: Executive 6"X12" Dark Bronze Aluminum Structure. With 1/4" Bronze tint polycarbonate Glazing, 1/2" white Dome roof with Fascia & Integral gutter, Full length Aluminum Bench w/backrest
Cost Approximately \$5,000.00 each

Shelter
Installer: B-Buzz Construction
General Contractor
549 45th Street
Baltimore, MD 21224
Phone: (410) 284-7620 FAX (410) 284-7621

(Installation cost depends on what work needs to be performed on average \$4,500.00 to \$9,000.00 Best guess estimate.)

Base: Concrete Pad 8' X 14' X 6" thick with reinforcement wire. On a gravel base to allow for drainage.

Electrical: 1 fluorescent light 4ft long 120V, 1 load center Tamper proof, 1 Light sensor, 1/2 conduit tubing 1/2 inch PVC tubing for power feed. Conduit will be secured to shelter header and support columns. Installation of electrical components shall be in accordance with Local, state and federal codes.

Electronic Sign: Nextbus Arrival will be Provided Installed and maintained by CTC Personnel.

Fred A Baumgardner
Service Quality Manager
Corridor Transportation Corp.

NOTE: SEE SHEET 3 FOR REMAINING PARKING LEVELS AND SHEET 4 FOR SOUTH AND WEST ELEVATIONS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Valerie Jopic 3-4-16
Director Date

Neil S. ... 3-4-16
Chief, Division of Land Development Date

Paul ... 2-29-16
Chief, Development Engineering Division Date

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 1/2/2014

GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WNCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

EXPIRATION DATE: MAY 28, 2016.

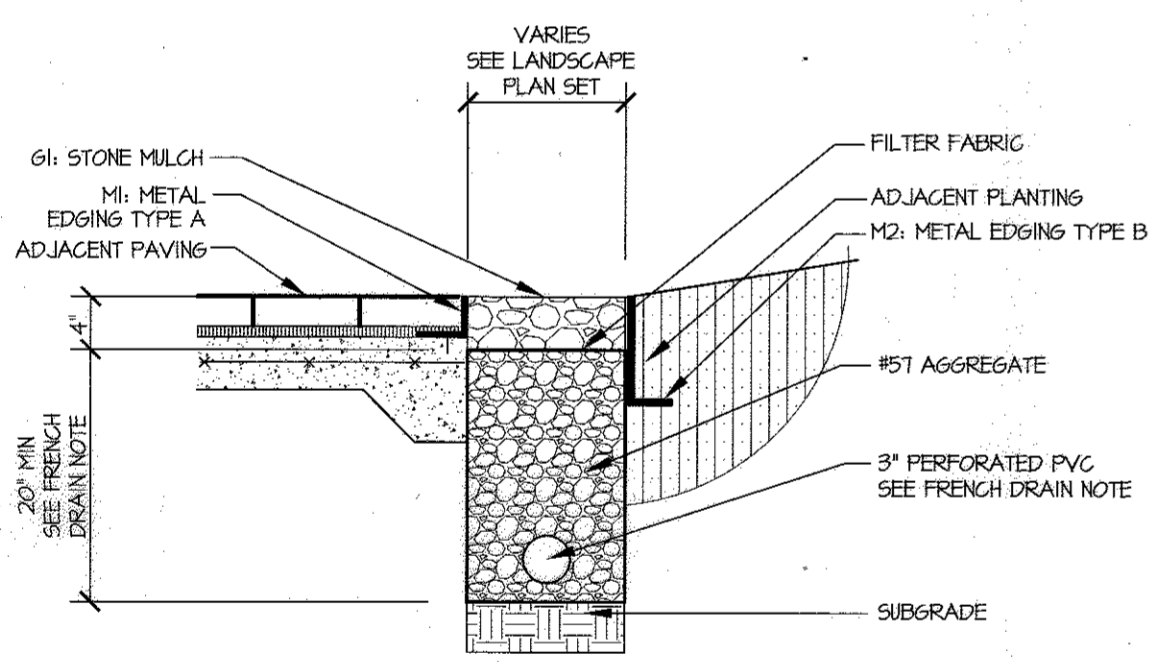
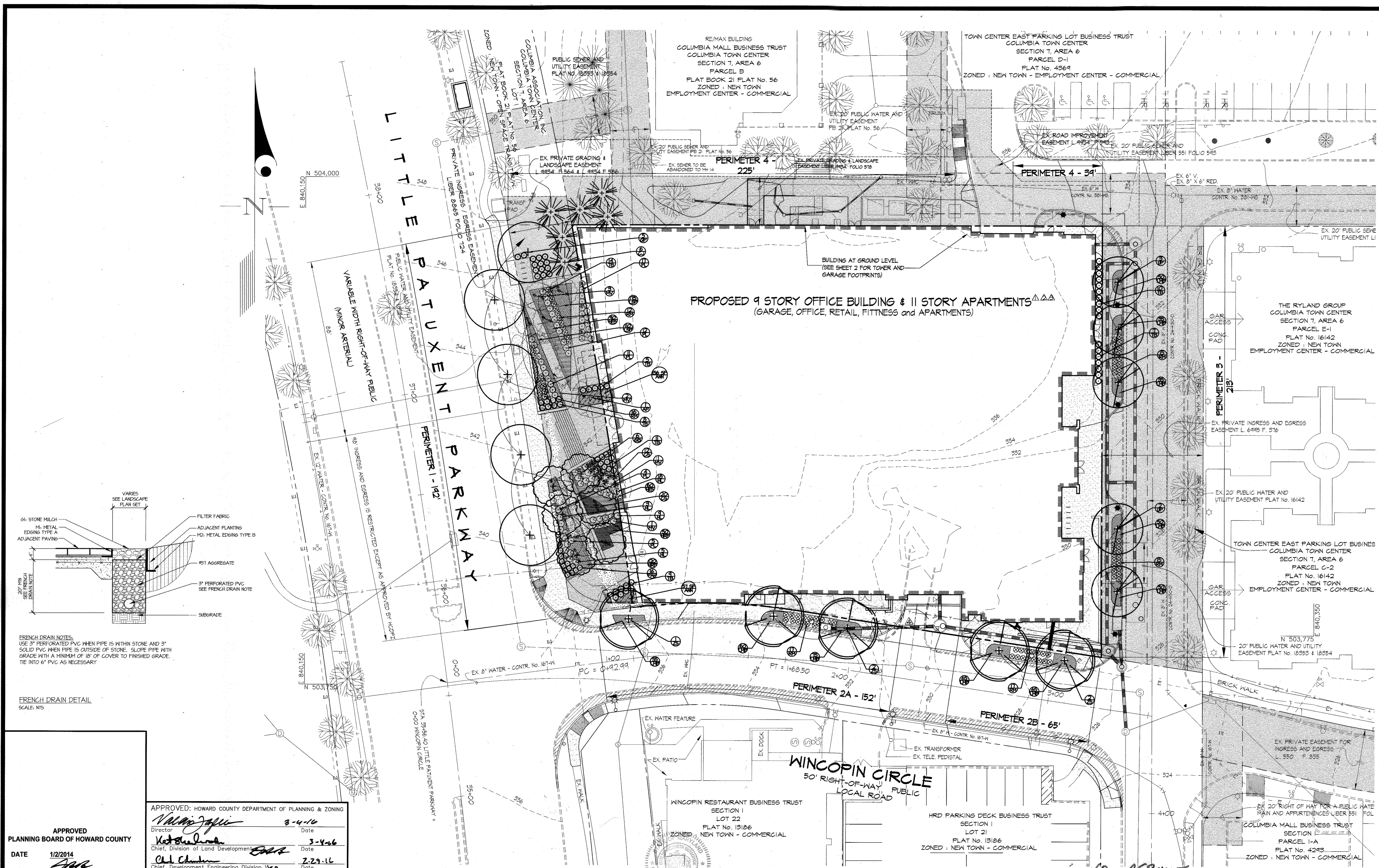
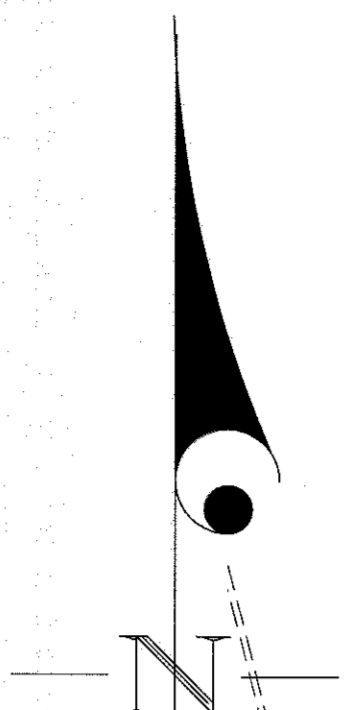
REVISOR: *NO ASBUILT*
INFORMATION 06/12/2017

PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB., 2016	30 - 20	5 OF 19

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FRENCH DRAIN NOTES:
 USE 3" PERFORATED PVC WHEN PIPE IS WITHIN STONE AND 3" SOLID PVC WHEN PIPE IS OUTSIDE OF STONE. SLOPE PIPE WITH GRADE WITH A MINIMUM OF 1/8" OF COVER TO FINISHED GRADE. TIE INTO 6" PVC AS NECESSARY.

FRENCH DRAIN DETAIL
 SCALE: NTS

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 1/2/2014

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *Valmir Japic* 3-4-16
 Chief, Division of Land Development: *Netasha...* 3-4-16
 Chief, Development Engineering Division: *Chad...* 2-23-16

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-850-1820 DC,VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.
02/2014	TOWER FOOTPRINT REVISED & LANDSCAPING UPDATED	CLW	DP
03/2014	TOWER FOOTPRINT REVISED & LANDSCAPING UPDATED	CLW	DP
06/2014	TOWER FOOTPRINT REVISED & LANDSCAPING UPDATED	CLW	DP

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12976, EXPIRATION DATE: MAY 26, 2016.

PREPARED FOR AND OWNER PARCEL C-3:
 LPP INVESTORS LLC
 10211 WINCOPIN CIRCLE
 SUITE 100
 COLUMBIA, MD 21044
 Attn: DAVID COSTELLO
 410-740-9500

REVISED LANDSCAPE PLAN INFORMATION 06/12/2017
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
 SECTION 7 AREA 6
 PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
 ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE NO.
1"=20'	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB, 2016	30 - 20	6 OF 19

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transport all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

3. Plant Measurements

All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.

a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.

b. Minimum branching height for all shade trees shall be six feet (6'), maximum eight feet (8').

c. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3.5"	14'-16'	6'-8'	32" diameter
3.5" - 4"	14'-16'	8'-10'	36" diameter
4" - 4.5"	16'-18'	8'-10'	40" diameter
4.5" - 5"	16'-17'	10'-12'	44" diameter
5" - 5.5"	16'-20'	10'-12'	48" diameter
5.5" - 6"	18'-20'	12'-14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

1. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

2. Digging

All plant material shall be dug, balled and burlapped (B&B) in accordance with the "AAN Standards".

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.

b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	PIT		DEPTH
	ROOT BALL	DIAMETER	
3" - 3.5" cal.	32"	64"	28"
3.5" - 4" cal.	36"	72"	32"
4" - 4.5" cal.	40"	80"	36"
4.5" - 5" cal.	44"	88"	40"
5" - 5.5" cal.	48"	96"	44"
5.5" - 6" cal.	52"	104"	48"

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The calculated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.

b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.

c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.

d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail".

5. Plant Pruning, Edging and Mulching

a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practices. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.

b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

c. After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

Sodding

All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4' long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Vista, or Escort.

LANDSCAPING NOTES

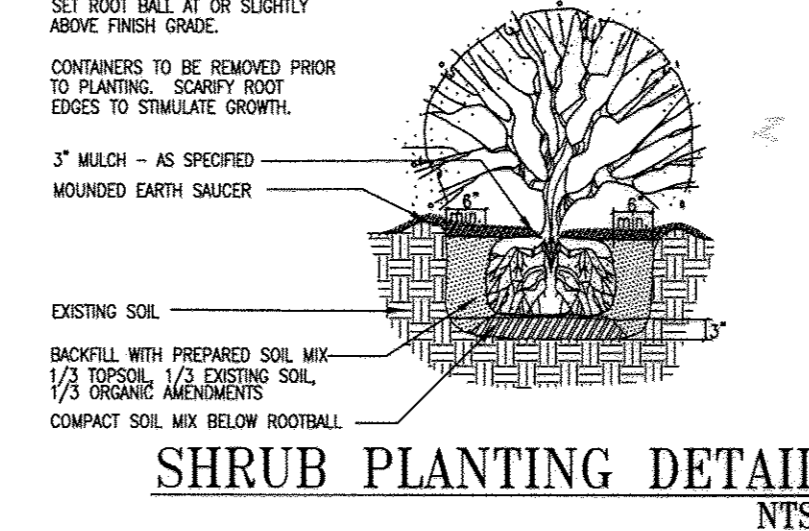
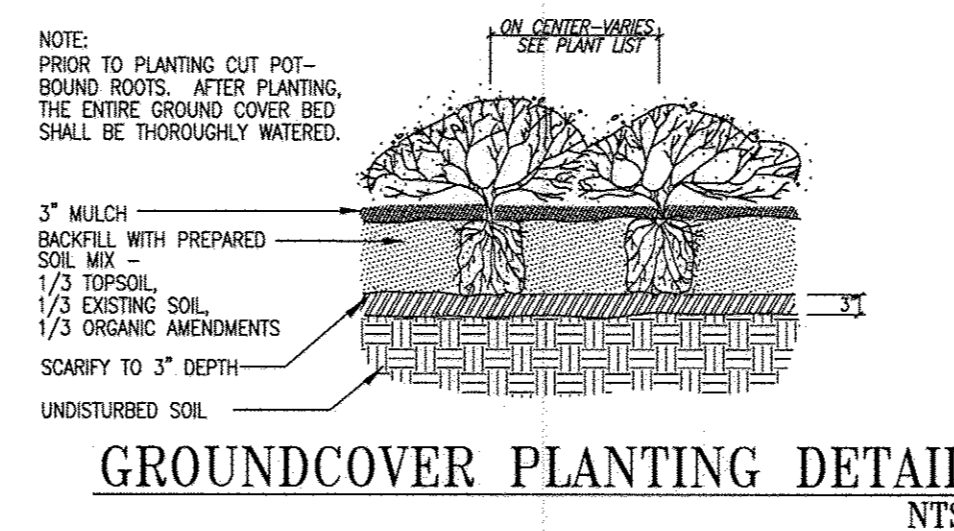
- This plan has been prepared in accordance with the New Town Alternative Compliance provisions of Section 16.124 of the Howard County Code and the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
- Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- No substitution shall be made without written consent of the owner or his representative, HRD and the Department of Planning and Zoning.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
- The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- Financial surety for the required landscaping per schedule A has been posted as a part of the Developer's Agreement in the amount of \$5,850.00

II. Tabulation for landscape shown:
Required planting by HRD for 1.01 acres of residential = 50 trees

Planting provided:
Shade Trees 21
Ornamental Trees 9
Evergreen Trees 0
Shrubs provided: 217

Total E.S.T. = 48.2
*E.S.T., or Equivalent Shade Tree

12. The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.



PLANT SCHEDULE

KEY QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT./B&B	SPACING	COMMENTS
CANOPY TREES						
GB 6	Quercus bicolor 'AUTUMN GOLD'	'AUTUMN GOLD' MAIDENHAIR TREE	3" Cal.	B4B	AS INDICATED	MATCHED, MALE ONLY
FO 5	Platanus occidentalis	CYPRESS	3" Cal.	B4B	AS INDICATED	MATCHED
UP 5	Ulmus parviflora	LACEBARK EM	3" Cal.	B4B	AS INDICATED	MATCHED
ZS 5	Zelkova serrata 'VILLAGE GREEN'	VILLAGE GROVE ZELKOVA	3" Cal.	B4B	AS INDICATED	MATCHED
EVERGREEN TREES						
CJ 0	Cryptomeria japonica	JAPANESE CRYPTOMERIA	12' HT.	B4B	AS INDICATED	FULL TO GROUND, MATCHED
ORNAMENTAL TREES						
AP 0	Acer palmatum 'SANGO-KAKU'	SANGO KAKU JAPANESE MAPLE	8-10' HT.	B4B	AS INDICATED	SINGLE STEM
MV 1	Magnolia x soulangeana	SAUCER MAGNOLIA	8-10' HT.	B4B	AS INDICATED	
SHRUBS						
RM 05	Rhododendron 'MAGRANTHA'	MAGRANTHA AZALEA	24" HT.	CONTAINER	30" O.C.	
CS 12	Cotoneaster salicifolius 'REPERENS'	PARK CARPET COTONEASTER	18" SPFR.	CONTAINER	24" O.C.	
HP 20	Hydrangea paniculata 'LITTLE LIME'	LITTLE LIME HYDRANGEA	24-30" HT.	CONTAINER	36" O.C.	
PL 40	Prunus laurocerasus 'OTTO LUYKEN'	OTTO LUYKEN CHERRY LAUREL	24-30" HT.	CONTAINER	42" O.C.	
TB 59	Taxus baccata 'REPANDENS'	REPANDENS YEW	24" HT.	CONTAINER	36" O.C.	

PLANT SCHEDULE

KEY QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT./B&B	SPACING	COMMENTS
GROUND COVERS / ORNAMENTAL GRASSES / PERENNIALS / VINES						
CAS 12	Calamagrostis acutiflora 'STRICTA'	STRICTA FEATHER REED GRASS	# 3	CONTAINER	36" O.C.	
HES 150	Hemerocallis 'STELLA D'ORO'	STELLA D'ORO DAYLILY	#5P4	CONTAINER	18" O.C.	
HRF 170	Hosta x 'FRANCEE'	FRANCEE HOSTA	#5P4	CONTAINER	18" O.C.	
LMB 540	Liriope muscari 'BIG BLUE'	BIG BLUE LILYTURF	#5P4	CONTAINER	12" O.C.	
LSP 285	Liriope spicata	CREeping LILYTURF	#5P4	CONTAINER	12" O.C.	
PAH 16	Pennisetum alopecuroides 'HAHEL'	DWARF FOUNTAIN GRASS	# 3	CONTAINER	36" O.C.	
SEASONAL ANNUALS						
ANN 218 SF	SEASONAL ANNUALS					
TURF						
	TURF - TYPE TALL FESCUE			500		

- NOTES:
- SOME TREES MAY REQUIRE ADDITIONAL LEAD TIME. CONTACT VENDORS IMMEDIATELY TO SECURE MATERIAL.
 - REFER TO LANDSCAPE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: SOIL ANALYSES AND AMENDMENT RECOMMENDATIONS; SOURCE LIST AND PHOTOGRAPHS FOR INITIAL SELECTION; PHOTOGRAPHS FOR VERIFICATION.
 - REFER TO LANDSCAPE SPECIFICATIONS FOR TREE TAGGING REQUIREMENTS.
 - REFER TO LANDSCAPE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - QUANTITIES GIVEN ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE FOR MEETING THE DESIGN INTENT, AS INDICATED ON PLANTING PLANS.
 - ALL PLANTS ARE TO BE HEALTHY, FULL, BALANCED, AND EXCEPTIONALLY HEAVY.
 - PROVIDE TURF PER SPECIFICATIONS IN ALL DISTURBED AREAS NOT OTHERWISE PLANTED OR PAVED.

SCHEDULE-A: PERIMETER LANDSCAPE EDGE				
PERIMETER No.	1	2	3	4
USE SITUATION	FRONT/SIDE TO ROADWAY	FRONT/SIDE TO ROADWAY	FRONT/SIDE TO ROADWAY	INTERNAL PERIMETER
LANDSCAPE TYPE	B	B	B	N/A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	191 L.F.	217 L.F.	213 L.F.	
CREDIT FOR EXISTING VEGETATION	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM	NO	NO	NO	
NUMBER OF PLANTS REQUIRED				
SHADE TREES	4	4	4	
EVERGREEN TREES	5	5	5	
SHRUBS	0	0	0	
NUMBER OF PLANTS PROVIDED				
SHADE TREES	7	0	0	1
EVERGREEN TREES	0	0	0	0
OTHER TREES (# 2:1 substitution)	9	0	0	0
SHRUBS (10:1 substitution)	149	0	47	0

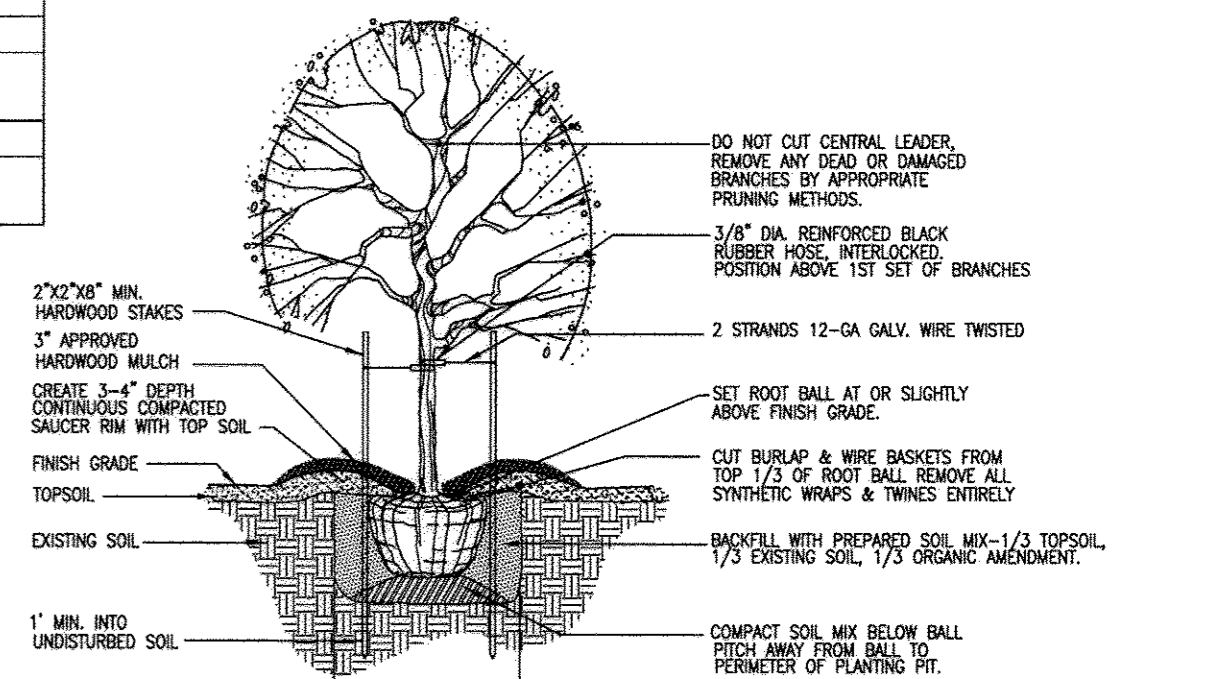
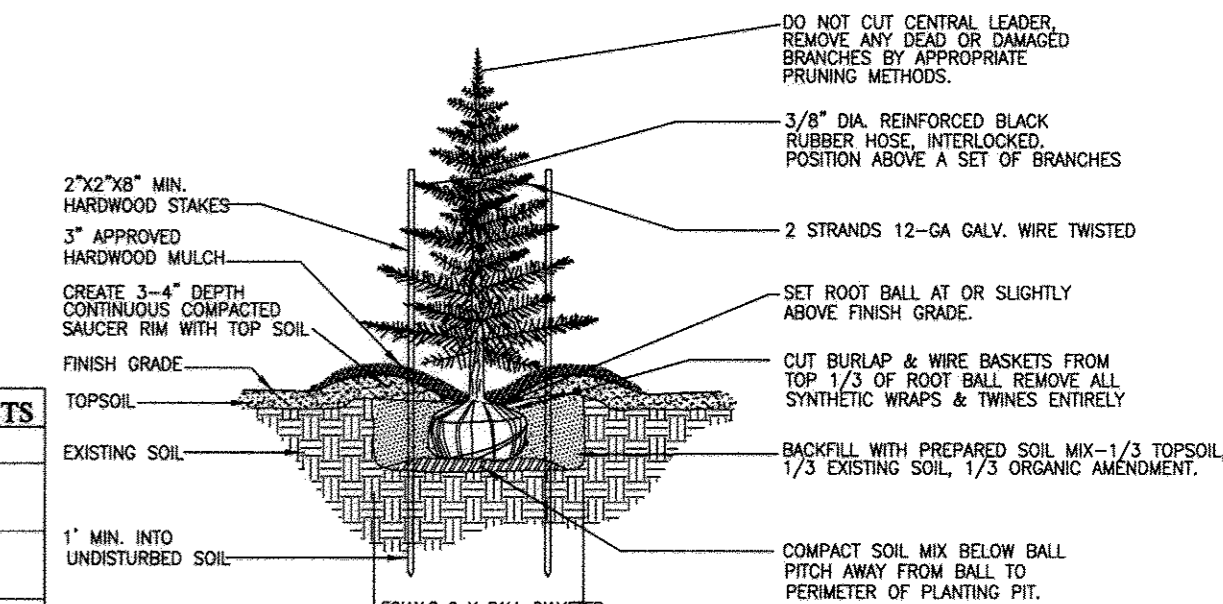
NOTE: I. 9 ORNAMENTAL TREES & 60 SHRUBS HAVE BEEN SUBSTITUTED FOR 15 EVERGREEN TREES, & 50 SHRUBS HAVE BEEN SUBSTITUTED FOR 5 SHADE TREES.

II. Schedule 'A' Number of required SHADE TREES for bonding: 12 x \$300 = \$3,600.00
Schedule 'A' Number of required EVERGREEN TREES for bonding: 15 x \$150 = \$2,250.00
Schedule 'A' Number of required SHRUBS for bonding: 0 x \$30 = \$0
Schedule 'A' total estimate for SURETY = \$5,850.00

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: Ron V. Goodman DATE: 2/10/16



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: [Signature] Date: 3-4-16
Chief, Division of Land Development: [Signature] Date: 3-4-16
Chief, Development Engineering Division: [Signature] Date: 7-29-16

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/2/2014

DATE	DESCRIPTION	BY	APP'R.
02/15/2011	Plant List Schedule A Revised	gt	DDG
02/2016	PLANT LIST & SCHEDULE A REVISED		
09/2014	PLANT LIST & SCHEDULE A REVISED		
08/2014	PLANT LIST & SCHEDULE A REVISED		

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 2375. EXPIRATION DATE: MAY 28, 2016.

PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

REVISED LANDSCAPE NOTES, DETAILS AND PLANT LIST
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB., 2016	30 - 20	7 OF 19

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Chris
Date

2/11/16
Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

Don V. Gaddam
Signature of Developer/Builder

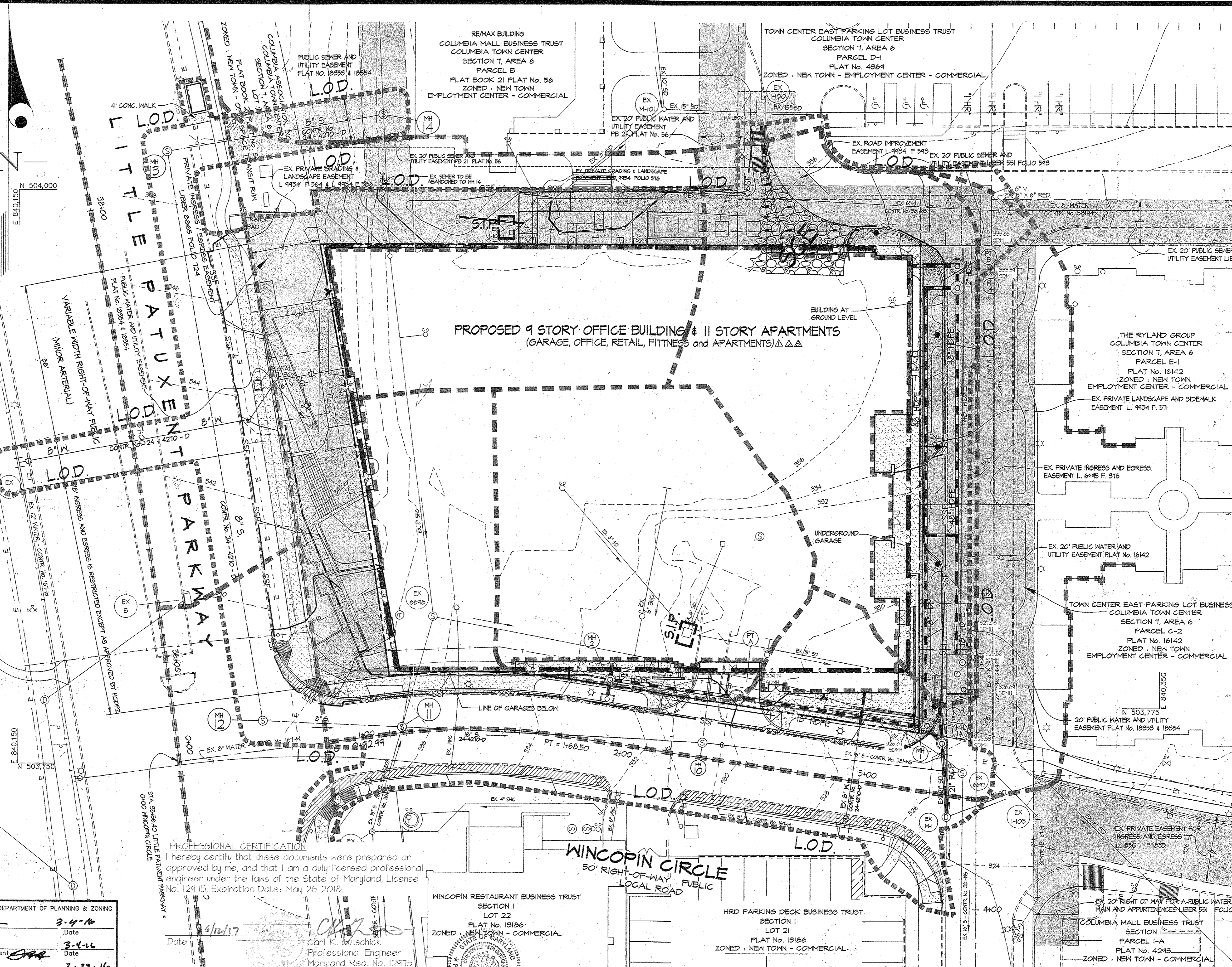
2/10/16
Date

LEGEND

- BUILDING AT GROUND LEVEL
- LIMITS OF UNDERGROUND GARAGE
- DRAINAGE AREA (D.A.)
- LIMIT OF DISTURBANCE (L.O.D.)
- SUPER SILT FENCE
- S.I.P. or C.I.P.
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John Robertson
Howard S.C.D.
Date



PROFESSIONAL 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 Maryland, License No. 12975, Expiration Date: May 26 2018.

Date: 6/12/17
Carl K. Gutschick
Professional Engineer
Maryland Reg. No. 12975

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: *Val M. Jolic* 3-9-16
Chief, Division of Land Development: *Chris* 3-4-16
Chief, Development Engineering Division: *Phil* 2-29-16

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/2/2014

WINCOPIN RESTAURANT BUSINESS TRUST
SECTION 11
LOT 22
PLAT No. 15186
ZONED: NEW TOWN - COMMERCIAL

HRD PARKING DECK BUSINESS TRUST
SECTION 1
LOT 21
PLAT No. 15186
ZONED: NEW TOWN - COMMERCIAL



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975, EXPIRATION DATE: MAY 26, 2018.

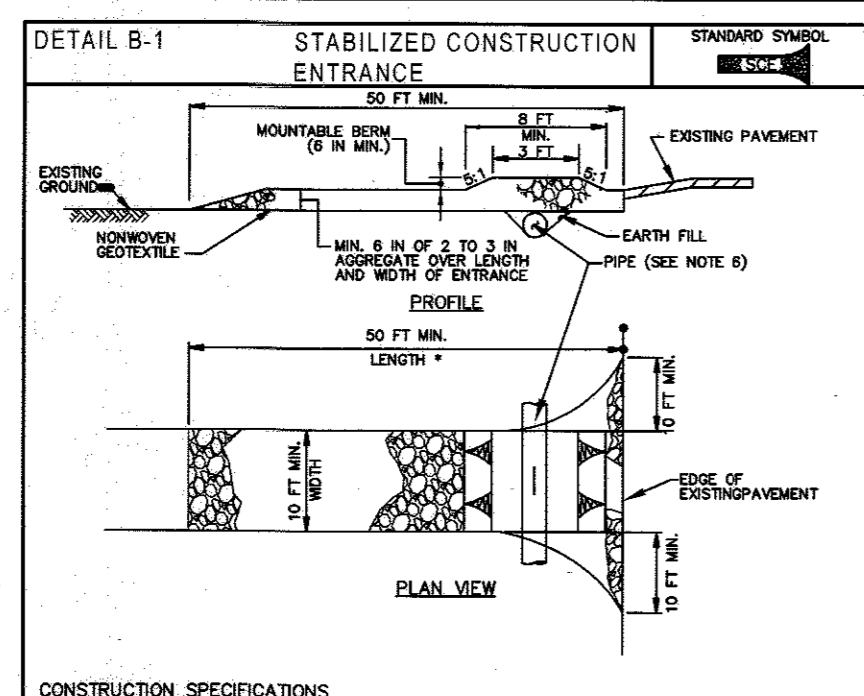
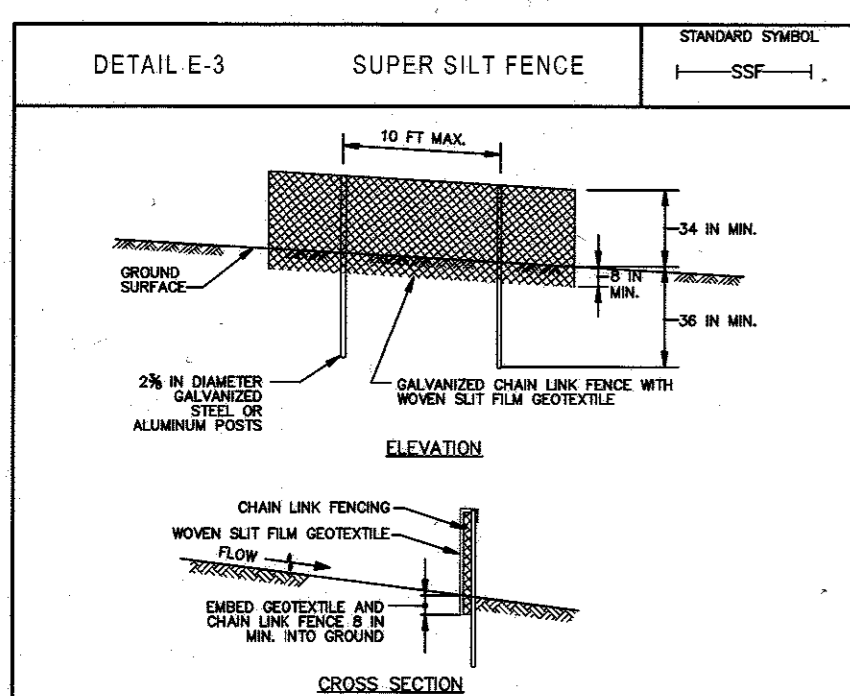
PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

ASBUILT'S
REVISED SEDIMENT CONTROL PLAN
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1

SCALE	ZONING	G. L. W. FILE No.
1"=20'	NT	04052
DATE	TAX MAP - GRID	SHEET
JUN 2017 FEB, 2016	30 - 20	8 OF 19

GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-889-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
02/2016	BUILDING FOOTPRINT AND LOD REVISED		
09/2014	BUILDING FOOTPRINT AND LOD REVISED		
06/2014	BUILDING FOOTPRINT REVISED, SEE OFF LITTLE PATUXENT PARKWAY REMOVED		



CONSTRUCTION SPECIFICATIONS

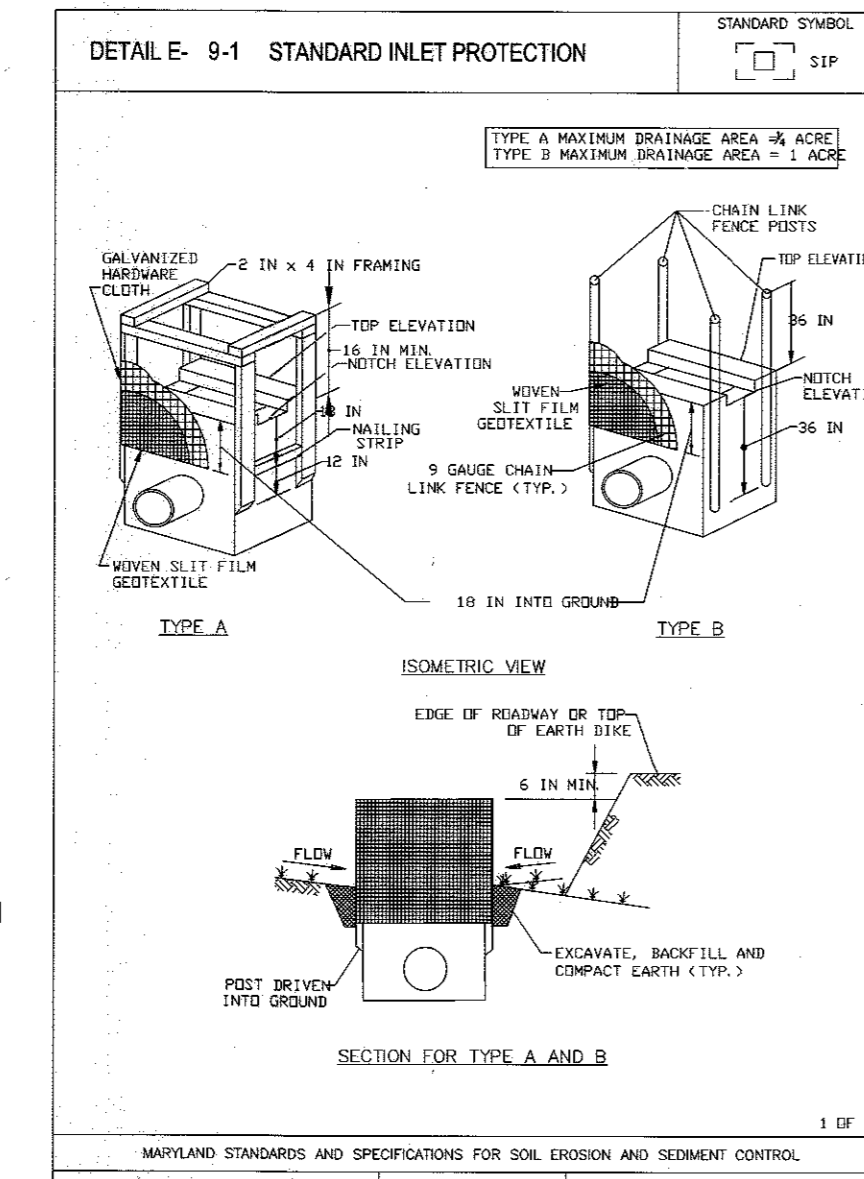
- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL PIPES OF 0.062 INCH WALL THICKNESS AND 66 FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. OVER THE POSTS A MINIMUM OF 4 INCHES INTO THE GROUND.
- FASTEN A 2X4 OR HEAVIER GALVANIZED CHAIN LINK FENCE (24 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR AUG BOLTS.
- FASTEN WOVEN Silt FILM GEOTEXTILE AS SPECIFIED IN SECTION H-4 MATERIALS, SECURELY TO THE SURFACE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. DMBE GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 6 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE LONGER THAN THE Silt FILM, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- EXTEND BOTH ENDS OF THE SUPER Silt FILM FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPLOUSE AT 45 DEGREES TO THE MAIN FENCE ELEMENT TO PREVENT RUNOFF FROM FORMING AROUND THE EDGE OF THE SUPER Silt FILM FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS OF SECTION H-4 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT BEHIND SIDE OF FENCE EXCEEDS 6 INCHES. IF UNDESIRABLE OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE Silt FILM. MINIMUM LENGTH OF 50 FEET FOR 10 FEET WIDE ENTRANCE. USE THE MINIMUM WIDTH OF 10 FEET. FLARE SIDE TO SIDE MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT THE ENTRANCE WITH A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE Silt FILM IS LOCATED AT A HIGH SPOT, THE PIPE SHOULD BE DRAGGED TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BEAM IS REQUIRED WHEN Silt FILM IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-4 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH OF THE Silt FILM.
- MAINTAIN ENTRANCE IN A CONDITION THAT PREVENTS TRACKING OF SEDIMENT AND STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BEAM, AND SPECIFIED DIMENSIONS. MAINTAIN BEAM AND SEDIMENT TRAP CLEAN AND OPERATIONAL. TRACKED INTO ADJACENT ROADWAY BY MAINTAINING SCRAPERS AND/OR SWEEPING. WASHING ROADWAY TO REMOVE AND TRACKED ONTO PROJECT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

SEQUENCE OF CONSTRUCTION

- Arrange pre-construction meeting with the Sediment Control Inspector and obtain the Grading Permit.
- Install stabilize construction entrances.
- Install sanitary sewer. Install only as much sewer as can be backfilled and stabilized in one day.
- Install perimeter super silt fence and inlet protection around existing inlets.
- Grade site and demolish remaining existing utilities.
- Begin building construction. Install site utilities.
- Install curb and gutter, sidewalks, and base pave all areas. Stabilize the building area with the finished floor slab. Stabilize remaining areas with grass seed and mulch.
- When all areas drain to the sediment controls have been stabilized and permission has been granted by the Sediment Control Inspector, remove those sediment controls. Stabilize the remaining areas with curb and gutter, and seed and mulch.
- Finish building construction. Remove all remaining sediment controls and stabilize with grass seed and mulch. Install landscaping and final paving.



STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

DEFINITION
CONTROLLING THE SUSPENSION OF DUST PARTICLES FROM CONSTRUCTION ACTIVITIES.

PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES TO REDUCE ON AND OFF-SITE DAMAGE INCLUDING HEALTH AND TRAFFIC HAZARDS.

CONDITIONS WHERE PRACTICE APPLIES
AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

- MULCHES: SEE SECTION B-4-2 SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS, SECTION B-4-3 SEEDING AND MULCHING, AND SECTION B-4-4 TEMPORARY STABILIZATION. MULCH MUST BE ANCHORED TO PREVENT BLOWING.
- VEGETATIVE COVER: SEE SECTION B-4-4 TEMPORARY STABILIZATION.
- TILLAGE: TILL TO ROUGHEN SURFACE, AND BRING LOGS TO THE SURFACE. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARRISONS AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION: SPRINKLE SITE WITH WATER UNTIL THE SURFACE IS MOSTLY WET. THE SITE MUST NOT BE IRRIGATED TO THE POINT THAT RUNOFF OCCURS.
- BARRIERS: SOLID BOARD FENCES, Silt FENCES, SNOW FENCES, BURST FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
- CHEMICAL TREATMENT: USE OF CHEMICAL TREATMENT REQUIRES APPROVAL BY THE APPROPRIATE PLAN REVIEW AUTHORITY.

STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B1 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY'S SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Walter J. Griffin* 3-4-16 Date

Chief, Division of Land Development: *Charles E. Brown* 3-4-16 Date

Chief, Development Engineering Division: *John P. HOP* 2-29-16 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Walter J. Griffin* 3-4-16 Date

Chief, Division of Land Development: *Charles E. Brown* 3-4-16 Date

Chief, Development Engineering Division: *John P. HOP* 2-29-16 Date

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CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4166

DATE: 02/2016 LOD REVISED
02/2014 LOD REVISED
06/2014 SEDIMENT CONTROL NOTES AND DETAILS UPDATED PER 2011 STANDARDS

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B1 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY'S SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

No.	SPECIES	APPLICATION RATE (lb./ac.)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-10-10)	LIME RATE
1	ANNUAL RYEGRASS	40 lb./ac.	Mar. 1 to May 15 Aug. 1 to Oct. 15	0.5 INCHES	436 lb./ac. (10 lb./1,000 sq ft)	2 tons/ac. (50 lb./1,000 sq ft)
2	PEARL MILLET	20 lb./ac.	May 16 to July 31	0.5 INCHES		

SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (410) 313-1855
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RESTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A 5 CALENDAR DAYS AS TO THE SURFACE OF ALL PERMETER DIKES, SWALES, DITCHES, PERMETER SLOPES, AND ALL SLOPES STEEPER THAN 1 HORIZONTAL TO 1 VERTICAL (3:1); AND
 - 3 CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDINGS, SOO, TEMPORARY SEEDINGS AND MULCHING (SEC. B). TEMPORARY STABILIZATION, WITH MULCH ALONE, CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ALL TOTAL AREA OF SITE: 1.03 AC.
AREA TO BE ROOFED OR PAVED: 2.23 AC. Δ
AREA TO BE VEGETATIVELY STABILIZED: 0.23 AC.
TOTAL CUT: 36,000 CF
TOTAL FILL: 5001 CF
Silt traps are to be disposed of on a site with an approved sediment control plan.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR GRADIENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 3 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.

PERMANENT SEEDING SUMMARY

No.	SPECIES	APPLICATION RATE	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
9	Certified Tall Fescue blend (95% by weight); Falcon IV Penn 190T & Rebel Exeeds and Certified Kentucky Bluegrass blend (5% by weight); Courtyard, Raven & Yankee	6-8 lb./1000 sq ft	Mar. 1 to May 15, Aug. 15 to Oct. 15	1/4 - 1/2 IN.	1.0 lb./1000 sq ft (45 lb./acre)	90 lb./1000 sq ft

GENERAL SPECIFICATIONS related to "green" in the most current UMD TT-77 may also be used

- CLASS OF TURFGRASS MUST BE MARYLAND STATE CERTIFIED. SOO LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
- SOD MUST BE MAINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROUND AND THATCH. BROKEN PADS AND TORN OR UNWORN EDGES WILL NOT BE ACCEPTABLE.
- STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE; WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
- SOD MUST NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
- SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

2. SOD INSTALLATION

- DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
- LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND THIRTY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH, ENSURING THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
- WHETHER PERFORATED, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SURFACE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
- WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.

3. SOD MAINTENANCE

- IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOST SOIL TO A DEPTH OF 4 INCHES. WATER SOON DURING THE HEAT OF THE DAY TO PREVENT SOIL FROM CRACKING.
- AFTER THE FIRST WEEK, SOO MAINTENANCE IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
- DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

CRITERIA

- GENERAL USE
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B3 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN THE USA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
 - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
 - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
- TURFGRASS MIXTURES
 - AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE. FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE. FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
 - KENTUCKY BLUEGRASS/TINE FESCUE: SHADE MIXTURE. FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED TINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (410) 313-1855
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RESTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A 5 CALENDAR DAYS AS TO THE SURFACE OF ALL PERMETER DIKES, SWALES, DITCHES, PERMETER SLOPES, AND ALL SLOPES STEEPER THAN 1 HORIZONTAL TO 1 VERTICAL (3:1); AND
 - 3 CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
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- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ALL TOTAL AREA OF SITE: 1.03 AC.
AREA TO BE ROOFED OR PAVED: 2.23 AC. Δ
AREA TO BE VEGETATIVELY STABILIZED: 0.23 AC.
TOTAL CUT: 36,000 CF
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Silt traps are to be disposed of on a site with an approved sediment control plan.
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- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 3 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.

PERMANENT SEEDING SUMMARY

No.	SPECIES	APPLICATION RATE	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
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GENERAL SPECIFICATIONS related to "green" in the most current UMD TT-77 may also be used

- CLASS OF TURFGRASS MUST BE MARYLAND STATE CERTIFIED. SOO LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
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- STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE; WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
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2. SOD INSTALLATION

- DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
- LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND THIRTY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH, ENSURING THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
- WHETHER PERFORATED, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SURFACE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
- WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.

3. SOD MAINTENANCE

- IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOST SOIL TO A DEPTH OF 4 INCHES. WATER SOON DURING THE HEAT OF THE DAY TO PREVENT SOIL FROM CRACKING.
- AFTER THE FIRST WEEK, SOO MAINTENANCE IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
- DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

B-4-2 STANDARD AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA

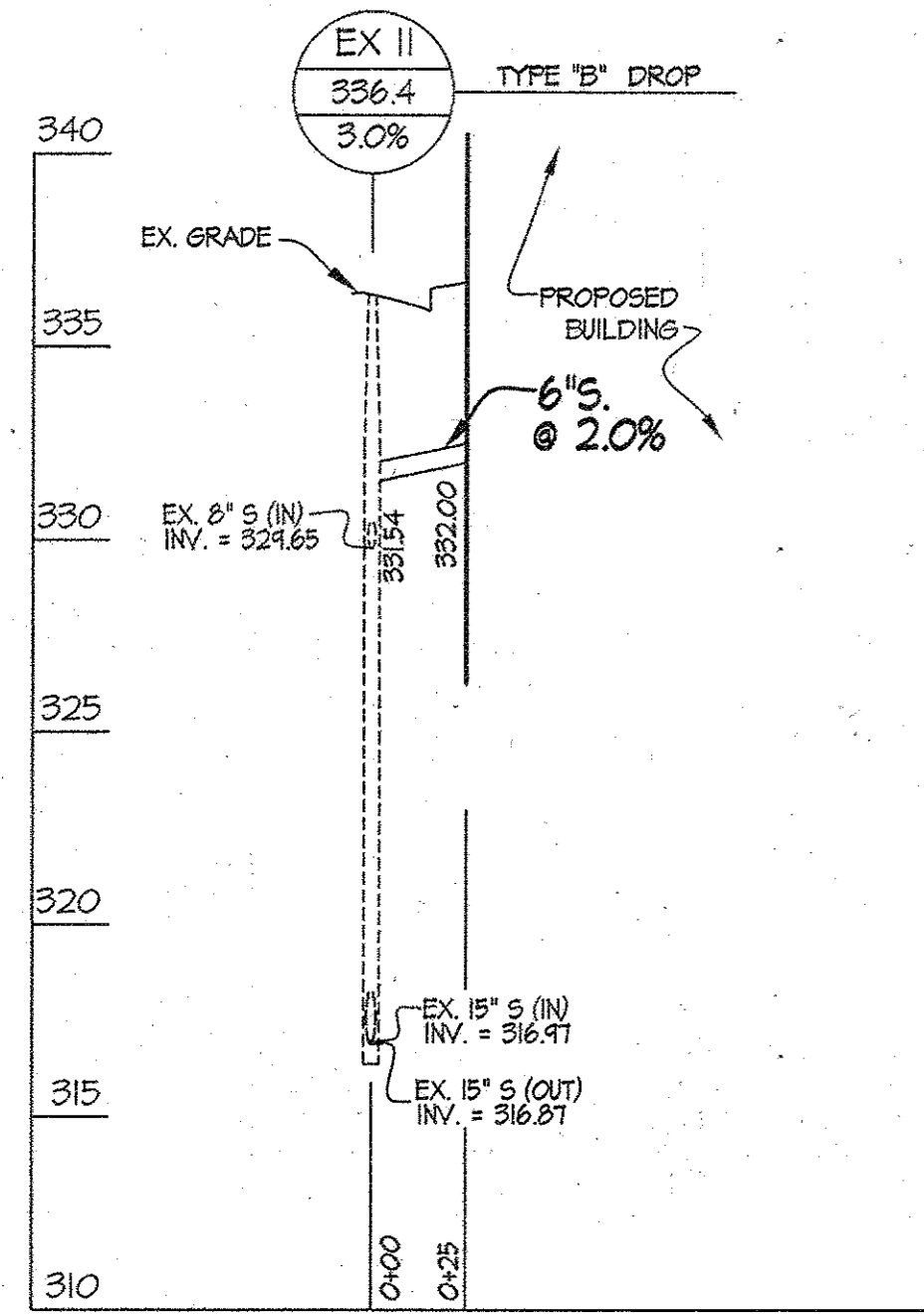
- SOIL PREPARATION
 - TEMPORARY STABILIZATION
 - SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT. SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER HARROWING OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT, THE SOIL SHOULD BE ROLLED AND MUST BE ROLLED TO A SMOOTH SURFACE BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 2:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES. TRACKING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - PERMANENT STABILIZATION
 - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL SOLIDS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 MICRONS) PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LONGGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RARE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDING PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN UNDISTURBED CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRABLE. SEEDING LOOSENESS MAY BE NECESSARY ON NEWLY DISTURBED AREAS.
- TOPSOILING
 - TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
 - CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CRITERIA FOR THE MARYLAND DEPARTMENT OF AGRICULTURE, URF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.
 - IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES: WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDNESS ZONES: 5b, 6a) CENTRAL MD: MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6b) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONES: 7A, 7B)
 - TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES. LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL BE WITHOUT DIFFICULTY.
 - IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

SEDIMENT CONTROL NOTES

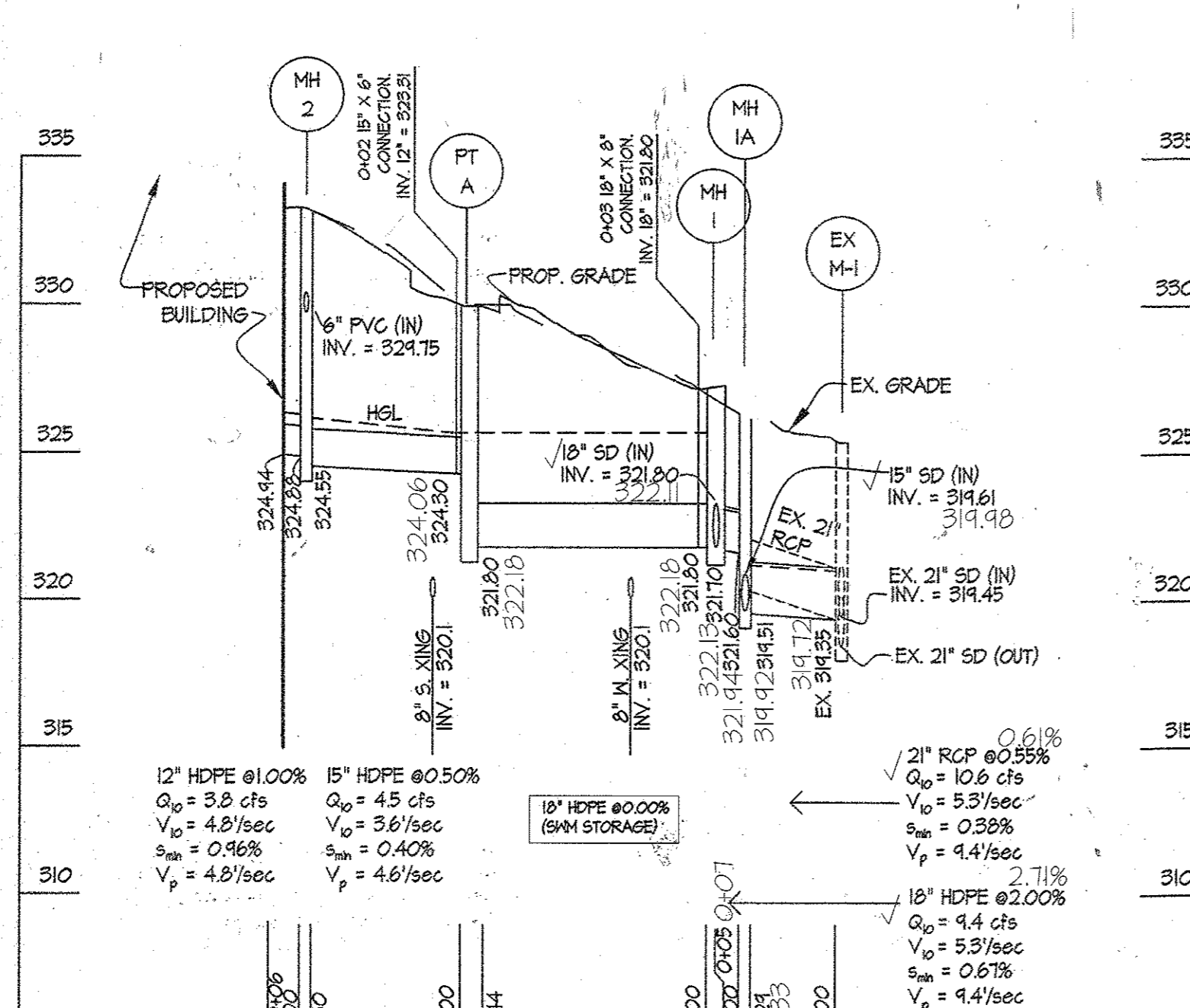
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PERMANENT SEEDING SUMMARY

No.	SPECIES	APPLICATION RATE	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE
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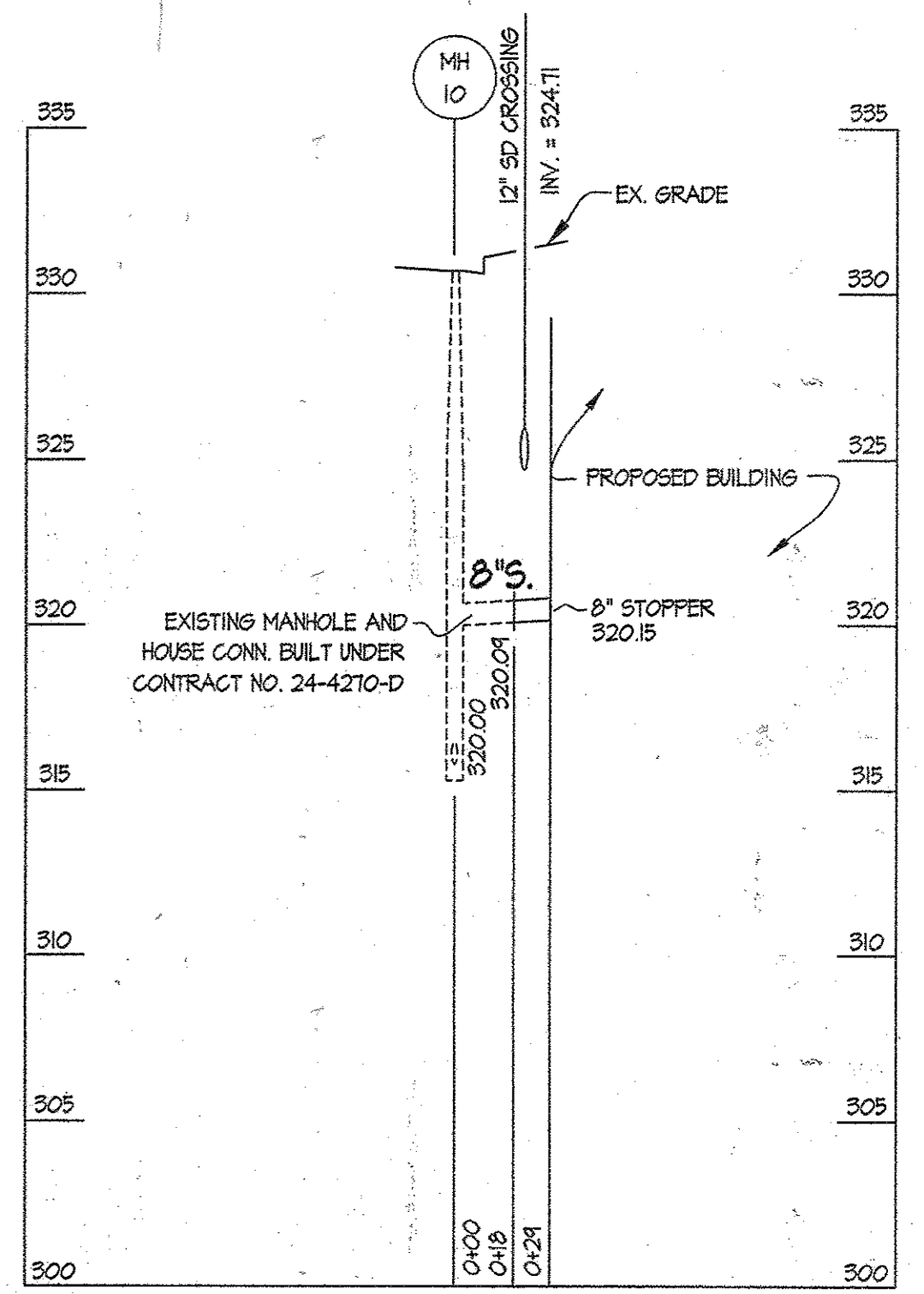
SANITARY SEWER PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

NO	TYPE	WIDTH (INSIDE)	TOP ELEVATION		INVERT ELEVATION		STD. DETAIL	LOCATIONS	REMARKS
			UPPER	LOWER	UPPER	LOWER			
I-5	A-10 INLET	2' - 6"	327.19	327.15	320.17	320.14	HO. CO. SD-4.03		
I-7	A-5 INLET	2' - 6"	336.64	336.58	332.64	---	HO. CO. SD-4.01		
I-4	A-5 INLET	2' - 6"	333.21	333.02	321.75	---	HO. CO. SD-4.01		
MH-1	STANDARD MANHOLE	6' - 0"	---	326.81	322.18	322.13	MD 384.05		
MH-A	STANDARD MANHOLE	4' - 0"	---	326.33	321.44	314.92	HO. CO. 6-512		
MH-2	STANDARD MANHOLE	4' - 0"	---	331.64	324.75	324.54	HO. CO. 6-512		
MH-4	STANDARD MANHOLE	6' - 0"	---	333.30	324.82	321.80	MD 384.05		
SF-A	'STORM'FILTER'	---	---	321.61	320.22	---	N/A		
FT-A	PRE-TREATMENT	---	324.74	324.42	322.18	---	N/A		
FT-B	PRE-TREATMENT	---	333.85	330.30	324.74	---	N/A		

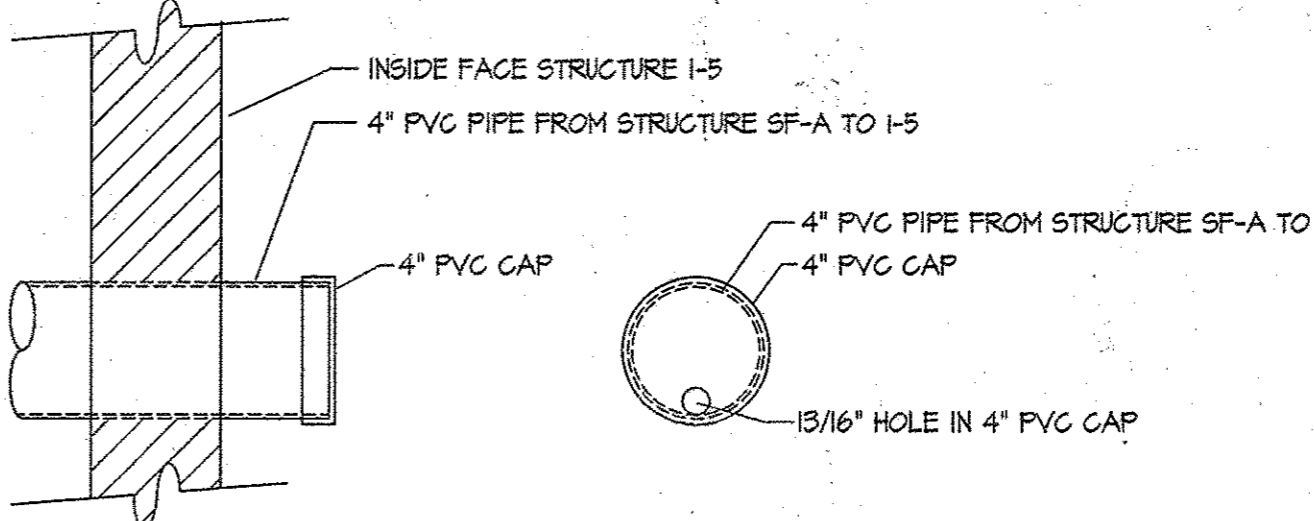
COORDINATE POINT GIVEN IS TO THE CENTERLINE OF STRUCTURE AT THE FACE OF CURB FOR INLETS AND TO THE CENTERLINE OF STRUCTURE FOR MANHOLES AND END SECTIONS.



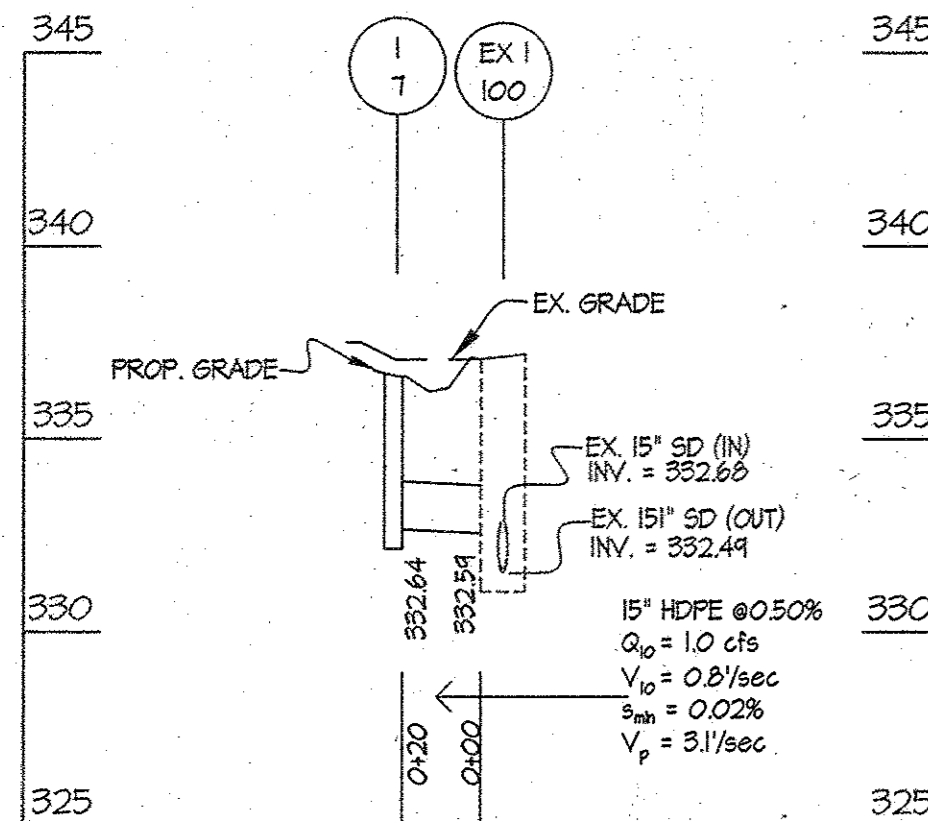
SANITARY SEWER PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

SIZE	TYPE	QUANTITY (L.F.)	REMARKS
4"	PVC	2'	
12"	HDPE	75'	
15"	HDPE	10'	
18"	HDPE	38'	
21"	RCP	34'	
48"	HDPE	381'	

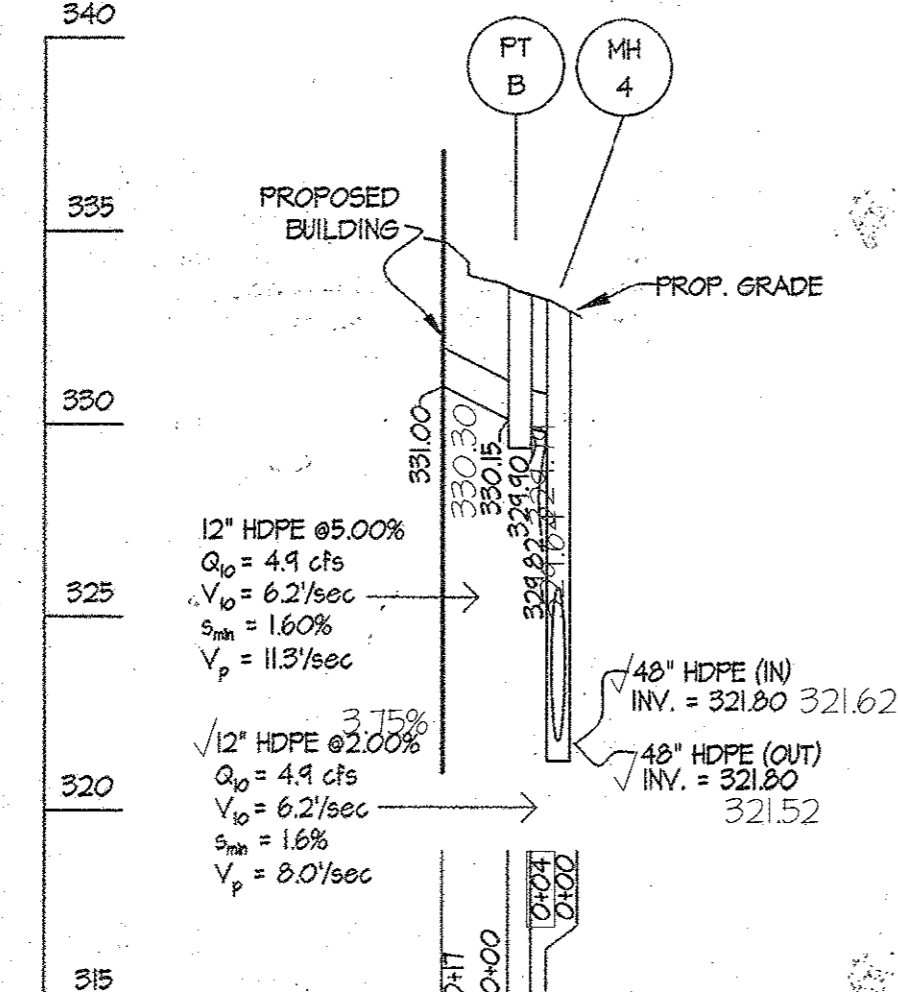
HDPE indicates High Density Polyethylene pipe, such as N-12 by ADS, or HI-Q by Hancor or an approved equal.
Trench bedding to be provided per Howard County Detail 2.01.
Trench for P.V.C. pipe and HDPE.



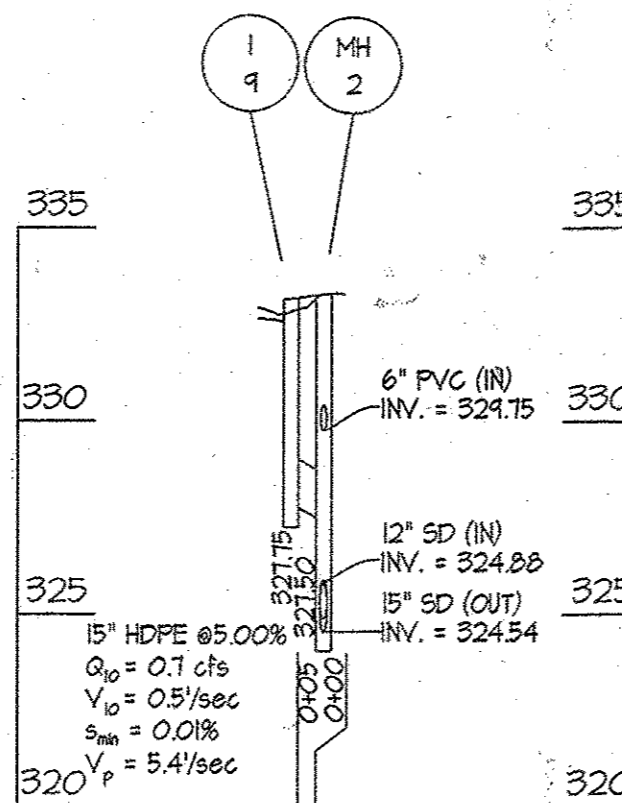
STORMWATER MANAGEMENT FACILITY SF-A RELEASE DETAIL
NOT TO SCALE



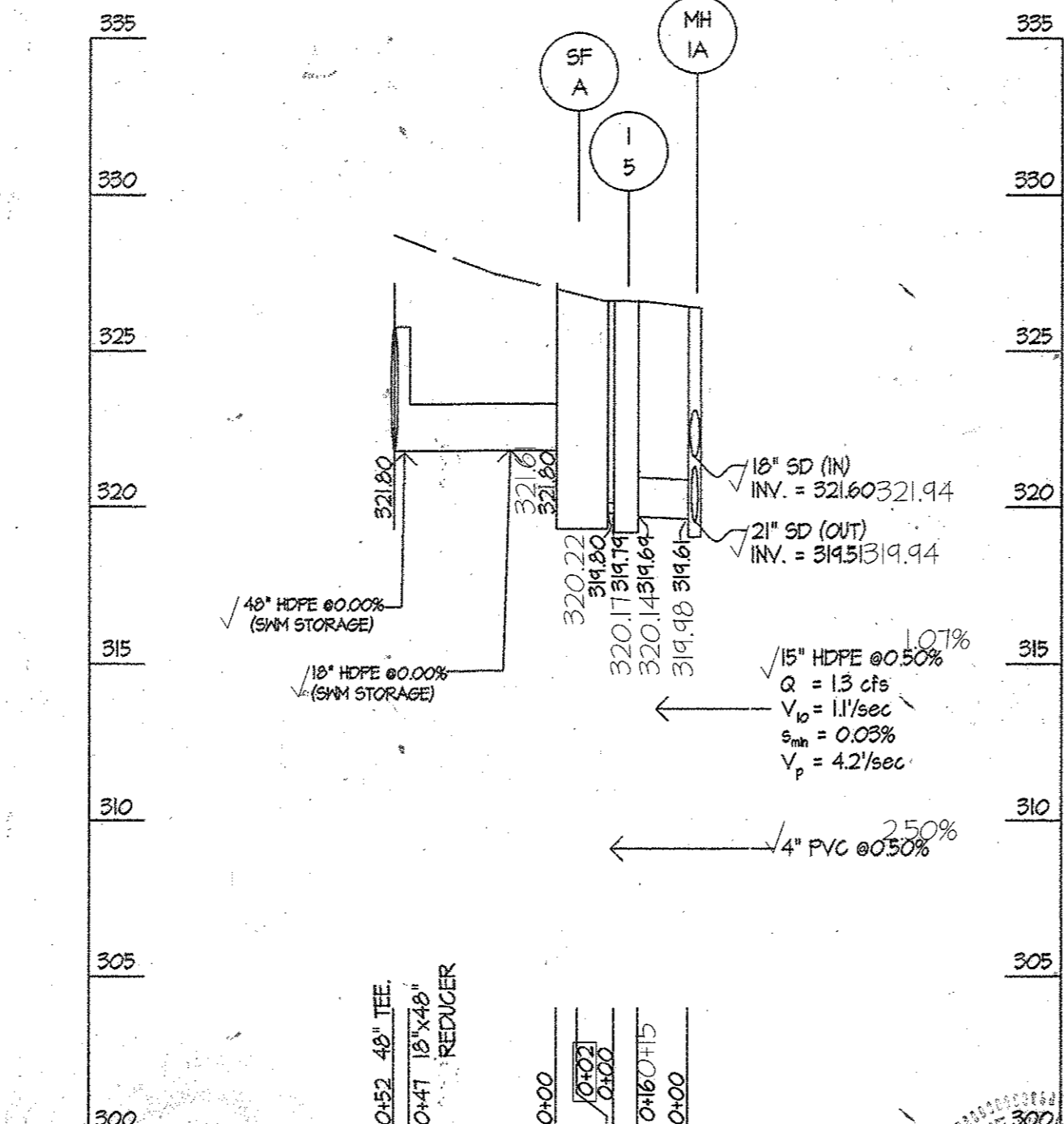
STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



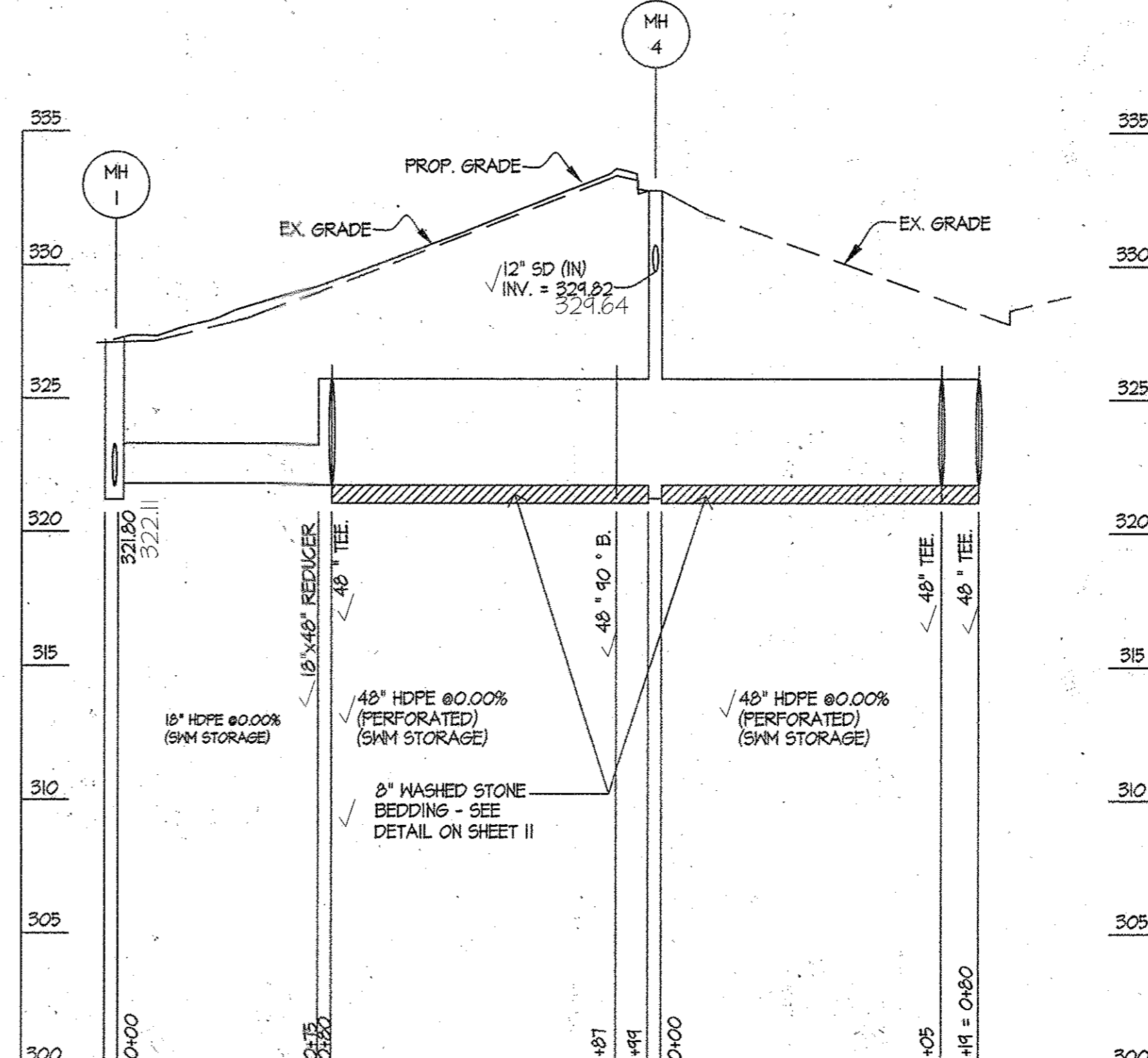
STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



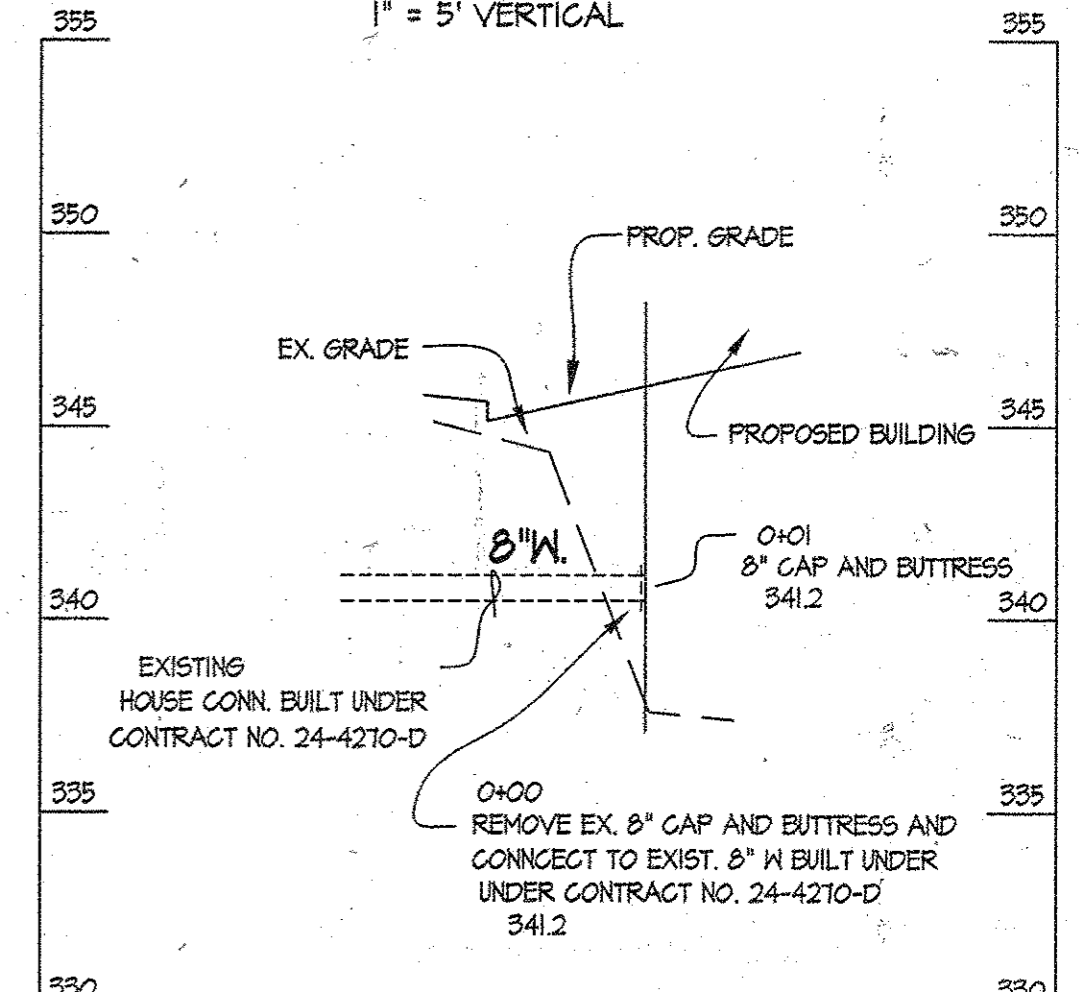
STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



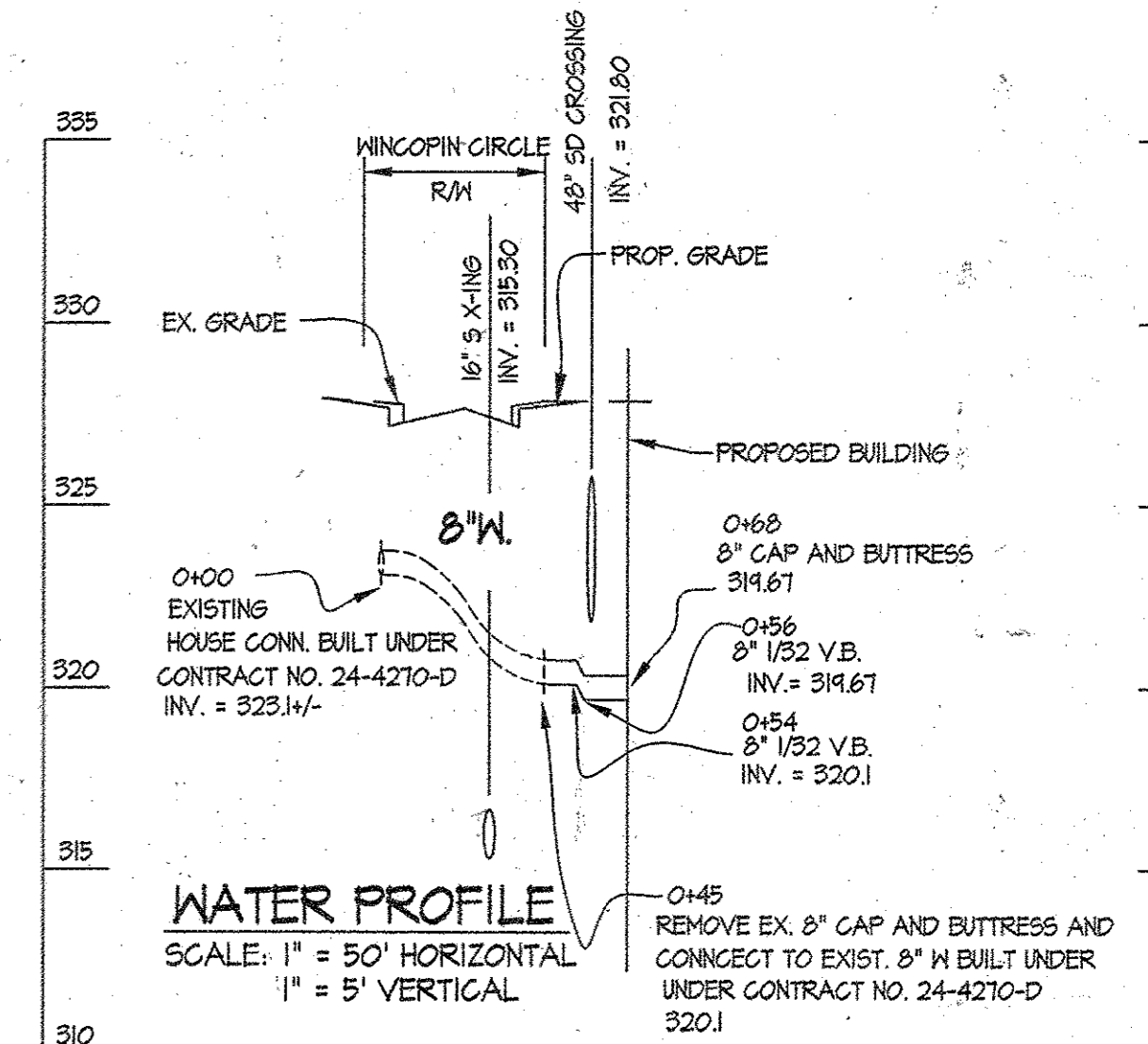
STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



STORM WATER MANAGEMENT MANIFOLD
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



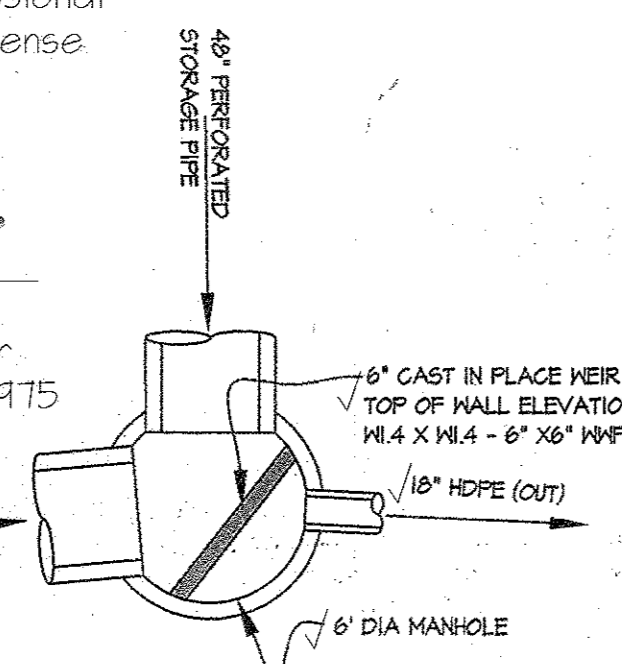
WATER PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL



WATER PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

PROFESSIONAL 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 Maryland, License No. 12975, Expiration Date: May 26 2018.

6/12/17
Date
Carl K. Gutschick
Professional Engineer
Maryland Reg. No. 12975



MH-1 SPLITTER DETAIL NTS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: [Signature] 3-4-14
Chief, Division of Land Development: [Signature] 3-1-16
Chief, Development Engineering Division: [Signature] 2-29-16

GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 FAX: 301-421-4188

DATE	REVISION
02/2016	STORM DRAIN PROFILES REVISED
03/2014	STORM DRAIN, WATER & SEWER PROFILES REVISED
08/2014	STORM DRAIN PROFILES REVISED

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975, EXPIRATION DATE: MAY 26, 2018.

PREPARED FOR AND OWNER PARCEL C-3:
LFP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

ASBULTS
REVISED UTILITY PROFILES AND SCHEDULES
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	NT	04052
DATE	TAX MAP - GRID	SHEET
JUN. 2017 FEB. 2016	30 - 20	10 OF 19

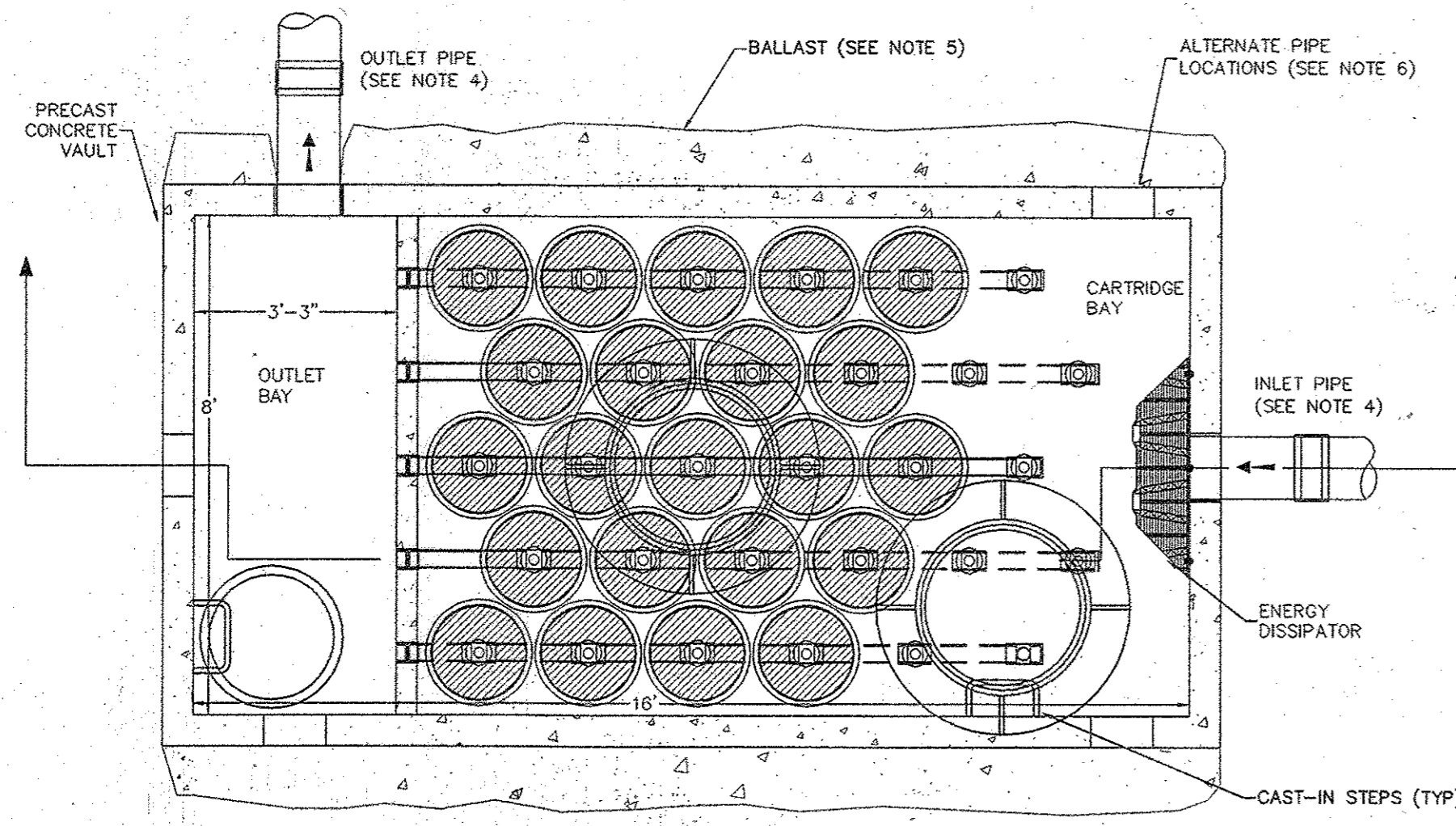
GENERAL NOTES

- 1) STORMFILTER BY STORMWATER MANAGEMENT, PORTLAND, OREGON (503-240-3363).
- 2) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR DETAILS.
- 3) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C858.
- 4) INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
- 5) ANTI-FLOATATION BALLAST TO BE SPECIFIED BY ENGINEER. BALLAST TO BE SET ALONG ENTIRE LENGTH OF BOTH SIDES OF VAULT. BALLAST MATERIALS TO BE PROVIDED BY CONTRACTOR.
- 6) PRECAST STORMFILTER EQUIPPED WITH KNOCKOUTS AT ALT. INLET/OUTLET LOCATIONS. CORINGS AVAILABLE WHEN SPECIFIED.
- 7) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.

8'x16' PRECAST VOLUME STORMFILTER DATA

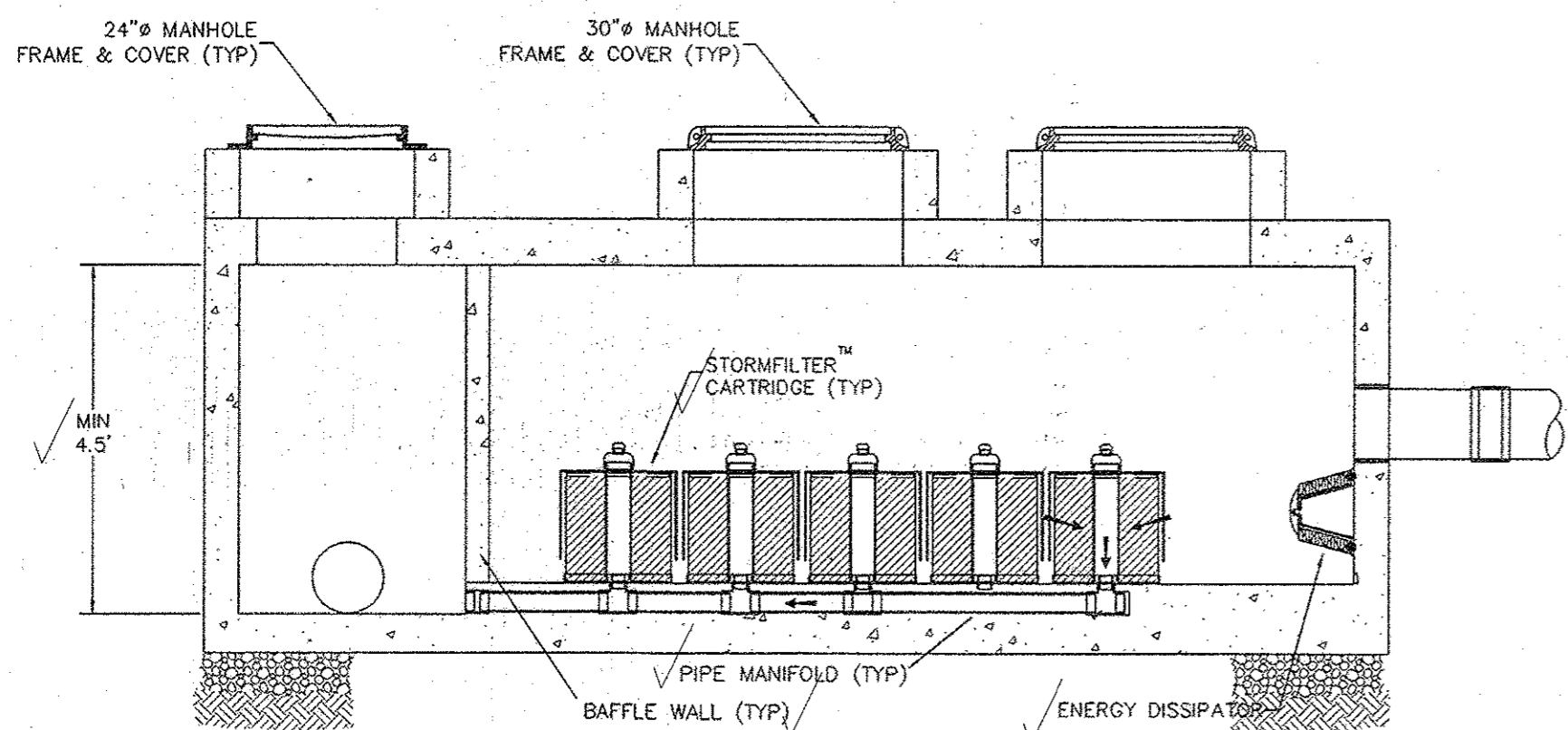
WATER QUALITY VOLUME (11"3)	2,154
NUMBER OF CARTRIDGES	10
CARTRIDGE OPERATING FLOWRATE (GPM)	1.7
PEAK OUTFLOW RATE (cfs)	1.7
MEDIA DATA	321.6 MATERIAL DIAMETER
PIPE DATA	321.80 HOPE 15"
INLET PIPE #1	320.22
INLET PIPE #2	320.22
OUTLET PIPE	319.80 PVC 4"
ANTI-FLOATATION BALLAST (USE N/A IF NOT REQUIRED)	WIDTH HEIGHT

NOTES/SPECIAL REQUIREMENTS:



8'x16' PRECAST VOLUME STORMFILTER - PLAN VIEW

SCALE: N.T.S.



8'x16' PRECAST VOLUME STORMFILTER - SECTION VIEW

SCALE: N.T.S.

THE STORMWATER MANAGEMENT StormFilter®
U.S. PATENT No. 5,322,629,
No. 5,707,527, No. 6,027,639,
No. 5,624,576, AND OTHER U.S.
AND FOREIGN PATENTS PENDING

SHEET	DATE	BY	REVISION
1/1			

8' x 16' PRECAST VOLUME STORMFILTER PLAN AND SECTION VIEW STANDARD DRAWING

DESIGNED BY: _____ DRAWN BY: _____
DATE: 00/00/00 PROJECT NO.: CTC - HR DRAWING FILE NAME: _____



PROFESSIONAL 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 Maryland, License No. 12915, Expiration Date: May 26 2018.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: _____ Date: 10/20/14
Chief, Division of Land Development: _____ Date: 10/20/14
Chief, Development Engineering Division: _____ Date: 9-23-14

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/2/2014

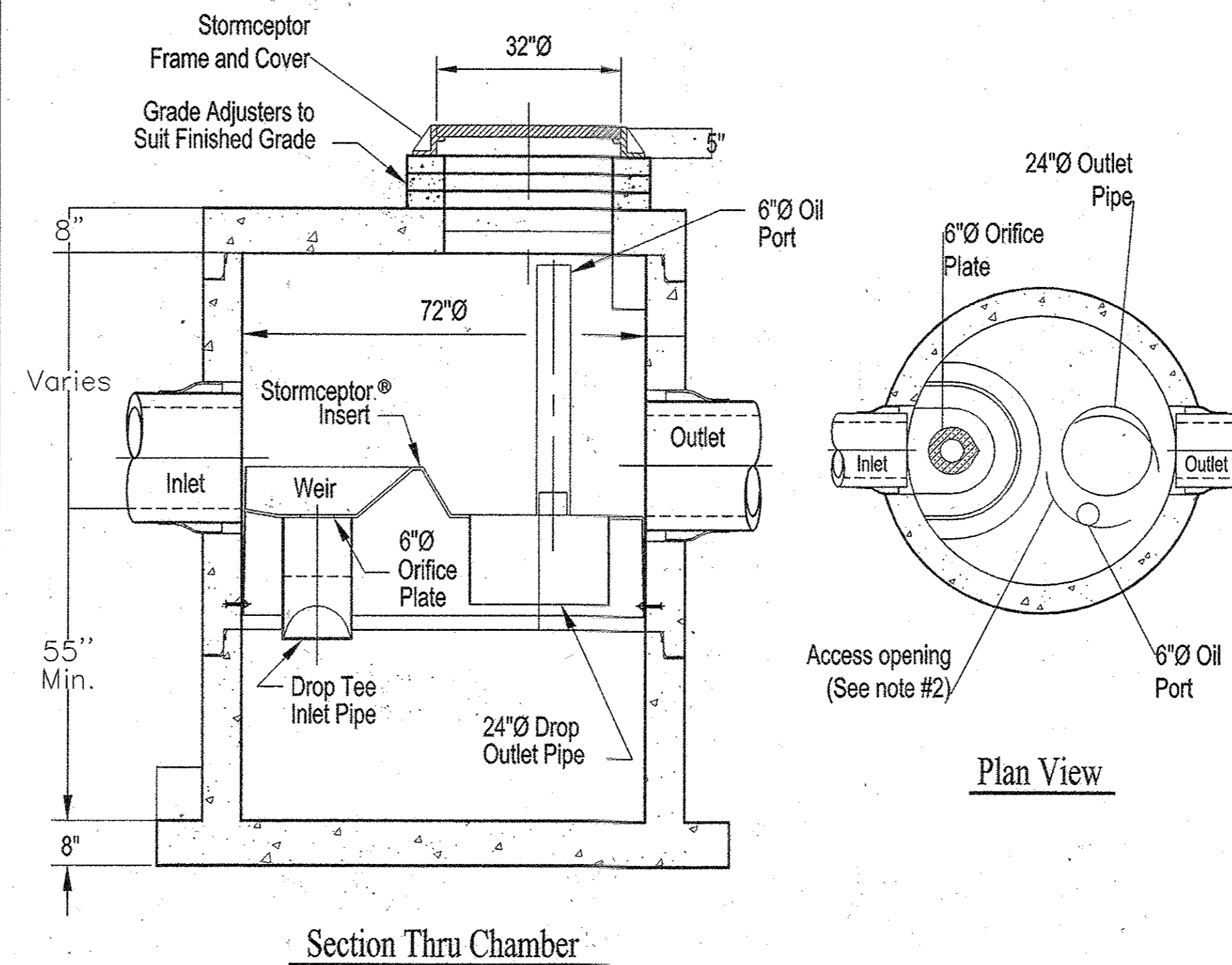
GLWGUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION
07/2014	PT-A DETAIL REVISED
06/2014	PT-A DETAIL REVISED

Rinker Concrete Pipe Division

STC 900 Precast Concrete Stormceptor® (900 U.S. Gallon Capacity)



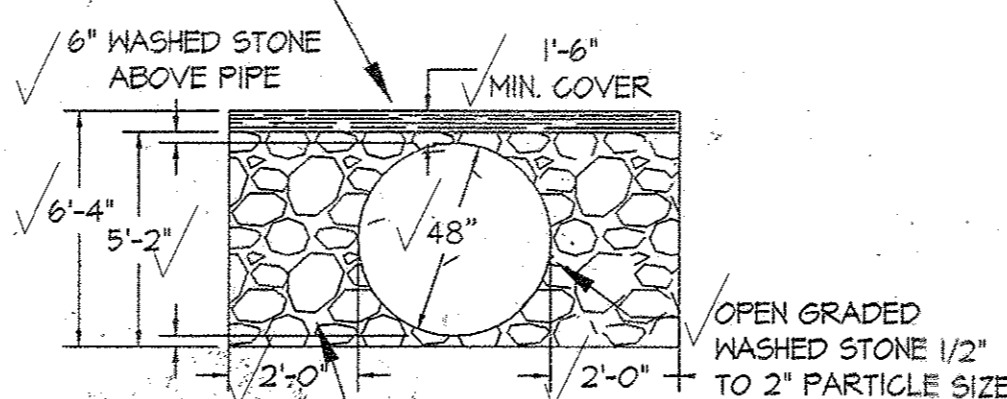
Notes:

1. The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
2. The Cover Should be Positioned Over The Outlet Drop Pipe and The Oil Port.
3. The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

PT-A & PT-B DETAIL

SCALE: N.T.S.

BACKFILL ENVELOPE SHALL CONSIST OF WELL GRADED GRANULAR FILL (AASHTO M-145(TABLE 2), A-1, A-2-4, A-2-5, A-3) PROPERLY PLACED IN 6" LIFTS AND COMPACTED TO 90% ACCORDING TO AASHTO T-180, OR 95% ACCORDING TO AASHTO T-99.



NOTE: WHERE LAYERS OF FILL THAT VARY IN GRADATION ARE ADJACENT TO EACH OTHER, A FILTER FABRIC BARRIER SHOULD BE USED TO PREVENT MIGRATION OF FINES. (I.E. WHERE A FINER GRAINED SELECT FILL IS PLACED ON TOP OF, OR BELOW, AN OPEN-GRADED STONE FILL.)

NOTE: UNDERGROUND STORMWATER MANAGEMENT MANIFOLD SYSTEM CONSISTS OF THE 48" PIPES FROM PT-A TO MH-1 TO MH-4.

NOTE: FOR PROFILE OF STORMWATER MANAGEMENT MANIFOLD SYSTEM, SEE SHEET 10

WIDTH OF STONE AROUND PERIMETER = 2.0 FT
THICKNESS OF STONE BELOW PIPE = 0.6 FT
THICKNESS OF STONE ABOVE PIPE = 0.5 FT
TOTAL RETENTION SYSTEM VOLUME = 19,066.9 CU. FT.



48" UNDERGROUND STORMWATER MANAGEMENT MANIFOLD DETAILS (TYP)

BACKFILL CROSS SECTION (TYP)

9-16-14
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12915, EXPIRATION DATE: MAY 26, 2018.

PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

REVISED STORMWATER MANAGEMENT DETAILS
PROPOSED APARTMENT, OFFICE, RETAIL & FITNESS BUILDING
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	NT	04052
DATE: JUN, 2017	TAX MAP - GRID	SHEET
SEPT, 2014	30 - 20	11 OF 19

CONSTRUCTION SPECIFICATIONS FOR STORMFILTERS

1. Stormwater Management to submit Operation and Maintenance Manual to contractor upon request.
2. Perlite Media: Perlite media shall be made of natural siliceous volcanic rock free of any debris or foreign matter. The expanded perlite shall have a bulk density ranging from 6.5 to 8.5 lb/ft³ and particle sizes ranging from 0.06 to 0.50 inches.
3. Doors: Doors shall have hot-dipped galvanized frame and covers. Covers shall have diamond plate finish. Each door to be equipped with a recessed lift handle and a locking latch with 3/8" pentahed hold-down bolts. Pentahed wrench to be provided for each set of doors, upon request. Doors shall meet H-20 loading requirements for incidental traffic minimum.
4. Frames and Covers: Frames and covers shall be gray cast iron and shall meet AASHTO H-20 loading requirements.
5. CONTRACTOR PROVIDED COMPONENTS:
Specifications for all contractor-provided components are minimum requirements. If a higher standard is shown on the plans or described in another section of the technical specifications, then the higher standard shall govern.
A. Sub-Base: Sub-base shall be six-inch minimum of 3/4-inch minus rock, 95% compaction. Compact undisturbed sub-grade materials to 95% of maximum density at +/- 2% of optimum moisture content. Unsuitable material below sub-grade shall be replaced to engineer's approval.
B. Concrete: Concrete shall be 3000 psi minimum at 28-day strength, 3/4-inch round rock, 4-inch slump maximum, placed within 90 minutes of initial mixing.
C. Silicone Sealant: Shall be pure RTV silicone conforming to Federal Specification Number TT S001543A or TT S00230C or Engineer approved.
D. Grout: Shall be non-shrink grout meeting the requirements of Corps of Engineers CRM-C588. Specimens molded, cured and tested in accordance with ASTM C-109 shall have minimum compressive strength of 6,200 psi. Grout shall not exhibit visible bleeding.
E. Backfill: Backfill shall be 3/4-inch minus rock at 95% compaction.
6. PRECAST CONCRETE VAULT
A. Vault floor shall slope 1/4 inch maximum across the width and slope downstream 1 inch per 12 foot of length. Vault top finish grade shall be even with surrounding finish grade surface unless otherwise noted on plans.
B. Contractor to grout all inlet and outlet pipes flush with vault interior wall. Contractor to grout internal baffle walls.
C. Sanded PVC fittings shall be used on all PVC inlet and outlet pipes.
D. Contractor responsible for inspecting and/or completing installation of flow spreaders and energy dissipators.
7. ANTI-FLOATATION BALLAST: Ballast shall be to the dimensions specified by the engineer and noted on the data block. Ballast shall run the entire length of the long side of the vault, both sides. Ballast shall not encase the inlet and/or outlet piping. Provide 12" clearance from outside diameter of pipe.
8. CLEAN UP: Remove all excess materials, rocks, roots, or foreign material, leaving the site in a clean, complete condition approved by the engineer. All filter components shall be free of any foreign materials including concrete and excess sealant.
9. FILTER CARTRIDGES:
A. Filter cartridges shall not be installed until the project site is clean and stabilized. The project site includes any surface that contributes storm drainage to the StormFilter™. All impermeable surfaces shall be clean and free of dirt and debris. All catch basins, manholes and pipes shall be free of dirt and sediments.
B. Contractor to notify Stormwater Management (800-548-4667) two weeks before filter cartridges are required on site. Stormwater Management will deliver and offload filter cartridges complete with filter media. Plugs will be provided for all manifold fittings not equipped with a filter cartridge.
C. Contractor to install filter cartridges.
D. Filter Cartridges: Tape shall be cleanly and completely removed from manifold fitting openings. Spool pieces shall be glued and inserted into all manifold fittings to be equipped with a filter cartridge. Filter cartridges shall be threaded onto the spool pieces until they contact the vault floor. Plugs shall be inserted without glue in all manifold fittings not equipped with a filter cartridge.

OPERATION AND MAINTENANCE SCHEDULE FOR STORMFILTER

FACILITY COMPONENT REQUIRING MAINTENANCE	MAINTENANCE ACTIVITY	WHEN MAINTENANCE ACTIVITY IS REQUIRED	EXPECTED FACILITY PERFORMANCE AFTER MAINTENANCE
STORM FILTER STRUCTURE AND STORAGE MANIFOLD	TRASH AND DEBRIS REMOVAL & SEDIMENT REMOVAL	FLOATABLE OBJECTS OR OTHER DEBRIS IS PRESENT IN THE FILTER OR MANIFOLD SYSTEM.	FILTRATION CAPACITY IS MAXIMIZED.
PIPING FITTINGS AND CONTROL DEVICES	ENSURE ALL FITTINGS ARE SECURE AND THAT ALL CONTROLS ARE UNBLOCKED. FLUSH WITH WATER.	DRAINAGE SYSTEM IS OBSTRUCTED BY DEBRIS OR SEDIMENT.	SYSTEM FLOWS FREELY.
STORM FILTER CARTRIDGES	REPLACE CARTRIDGES AND REMOVE ALL DEBRIS AND SEDIMENT WITHIN THE SYSTEM	MEDIA BECOMES SATURATED AND IS NO LONGER REMOVING POLLUTANTS. (ON AN ANNUAL BASIS OR AFTER A SPILL)	SYSTEMS POLLUTANT REMOVAL CAPACITY IS MAXIMIZED.

GENERAL NOTES:

1. A 20' MINIMUM DISTANCE SHALL BE MAINTAINED BETWEEN ANY TREES LOCATED ALONG THE CURB LINE AND ANY STREET LIGHT.
2. A 5' MINIMUM DISTANCE SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND A FIRE HYDRANT.

MARKING LEGEND

1. INSTALL 24" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING.
2. INSTALL DOUBLE 5" YELLOW REFLECTIVE THERMOPLASTIC PAVEMENT MARKING.
3. INSTALL 5" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING.
4. INSTALL 5" WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - 2' LINE, 6' SPACE.
5. INSTALL PERMANENT PREFORMED PAVEMENT MARKING ARROW (50' FROM STOP BAR)
6. INSTALL STANDARD HOWARD COUNTY CROSSWALK (USING WHITE REFLECTIVE THERMOPLASTIC MATERIAL).

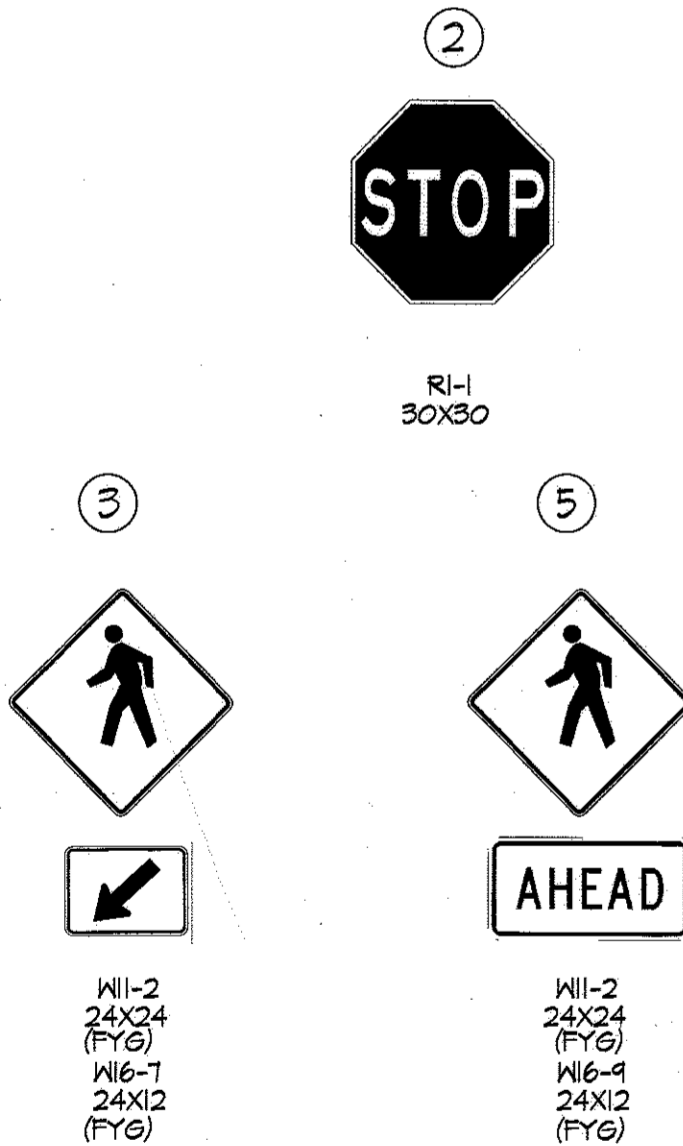
PAVEMENT MARKING NOTES:

1. EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS FOR THIS PROJECT WILL BE REMOVED BY GRINDING.
2. EXACT LOCATION OF ALL MARKINGS WITHIN THE PUBLIC RIGHT OF WAY SHALL BE APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 PRIOR TO INSTALLATION.

SIGNING NOTES:

1. SIGN ERRECTED AT THE SIDE OF THE ROAD SHALL BE MOUNTED AT A HEIGHT OF AT LEAST 7 FEET MEASURES FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVING.
2. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH" TYPE), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO ("QUICK PUNCH" HOLES) ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
3. ALL SIGN LOCATIONS WITHIN THE PUBLIC RIGHT OF WAY SHALL BE APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION PRIOR TO ANY INSTALLATIONS.

SIGN LEGEND



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Valerie J. Joffe* 3-4-16
 Chief, Division of Land Development: *Vicki Sealbach* 3-8-16
 Chief, Development Engineering Division: *Phil E. Smith* 2-23-16

APPROVED
 PLANNING BOARD OF HOWARD COUNTY

DATE: 1/2/2014

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
5-12-2017	Street light and private walks revised	gt	DDa
02/2016	BUILDING AND PRIVATE WALKS REVISED		
09/2014	BUILDING AND PRIVATE WALKS REVISED		
06/2014	GARAGE ENTRANCE REVISED		

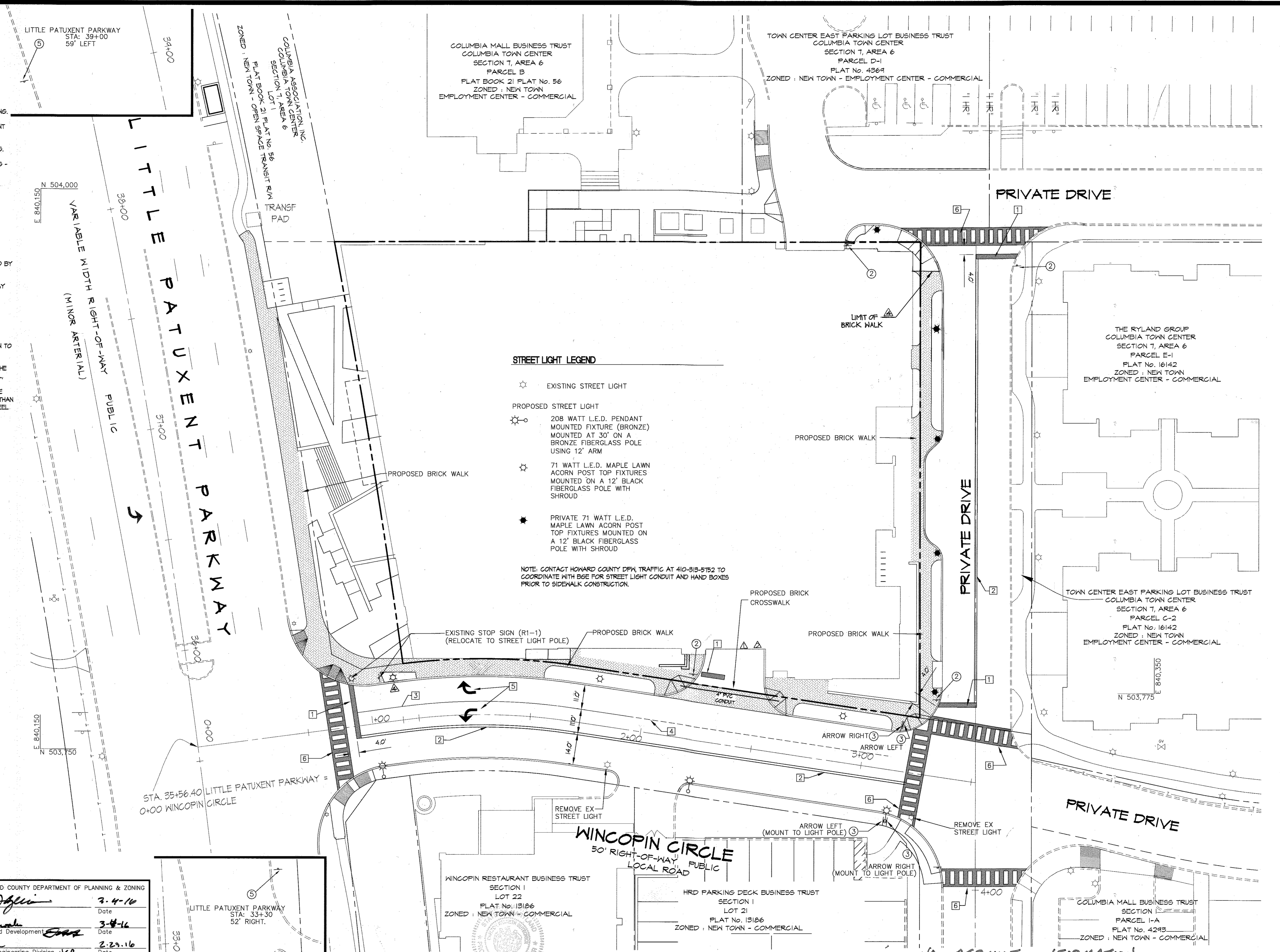
CKR
 PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1012375, EXPIRATION DATE: MAY 26, 2016.

PREPARED FOR AND OWNER PARCEL C-3:
 LPP INVESTORS LLC
 10211 WINCOPIN CIRCLE
 SUITE 100
 COLUMBIA, MD 21044
 Attn: DAVID COSTELLO
 410-740-9500

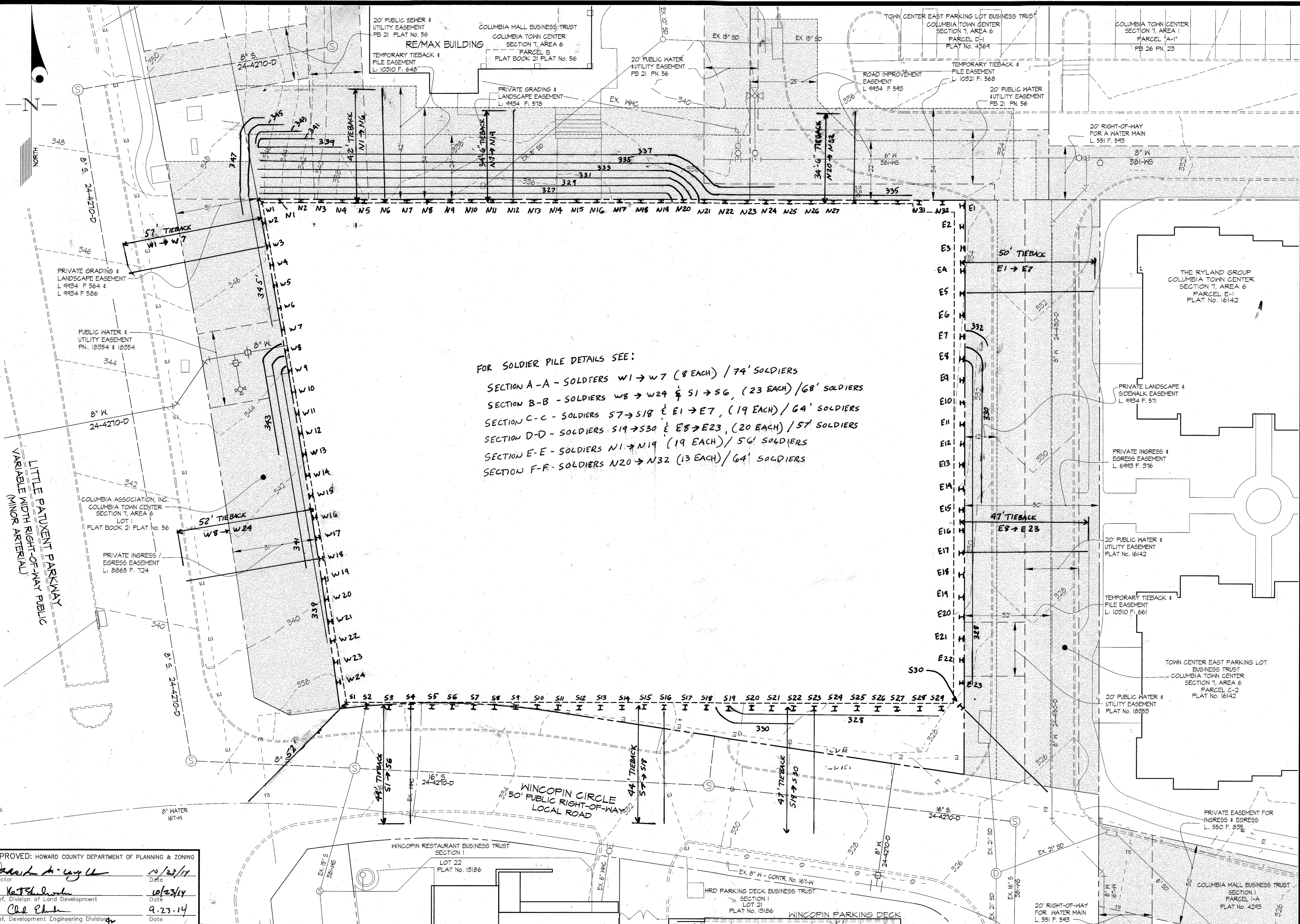
REVISED STREET MARKING, SIGNING AND LIGHTING PLAN 06/12/2017
PROPOSED APARTMENT, OFFICE, RETAIL, & FITNESS BUILDING
COLUMBIA TOWN CENTER
 SECTION 7 AREA 6
 PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
1"=20'	NT	04052
DATE	TAX MAP - GRID	SHEET
FEB, 2016	30 - 20	14 OF 19

L:\CADD\DRAWINGS\04052\SDP\04052SP14a.dwg 5/19/2006 10:48:47 AM EST



NOTE: ALL TIEBACKS ARE TEMPORARY. AT LOCATIONS WHERE TIEBACKS MAY INTERFERE WITH UTILITIES, PRIMARILY THE PROPOSED STORM DRAIN ALONG THE EAST SIDE, INSTALL TIEBACK'S FIRST, COMPLETE BUILDING STRUCTURE WITH BACKFILL, THEN INSTALL STORM DRAIN. CUT AND REMOVE TIEBACKS AS NECESSARY, ONLY AFTER BUILDING IS BACKFILLED, TO FACILITATE UTILITY INSTALLATION.



FOR SOLDIER PILE DETAILS SEE:
 SECTION A-A - SOLDIERS W1 → W7 (8 EACH) / 74' SOLDIERS
 SECTION B-B - SOLDIERS W8 → W24 & S1 → S6, (23 EACH) / 68' SOLDIERS
 SECTION C-C - SOLDIERS S7 → S18 & E1 → E7, (19 EACH) / 64' SOLDIERS
 SECTION D-D - SOLDIERS S19 → S30 & E8 → E23, (20 EACH) / 57' SOLDIERS
 SECTION E-E - SOLDIERS N1 → N19 (19 EACH) / 56' SOLDIERS
 SECTION F-F - SOLDIERS N20 → N32 (13 EACH) / 64' SOLDIERS

8/25/14

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16240, EXPIRATION DATE: 11/5/2014

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Mark H. Long* Date: 10/20/14
 Chief, Division of Land Development: *Walter J. ...* Date: 10/23/14
 Chief, Development Engineering Division: *Chad ...* Date: 9-23-14

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 1/2/2014

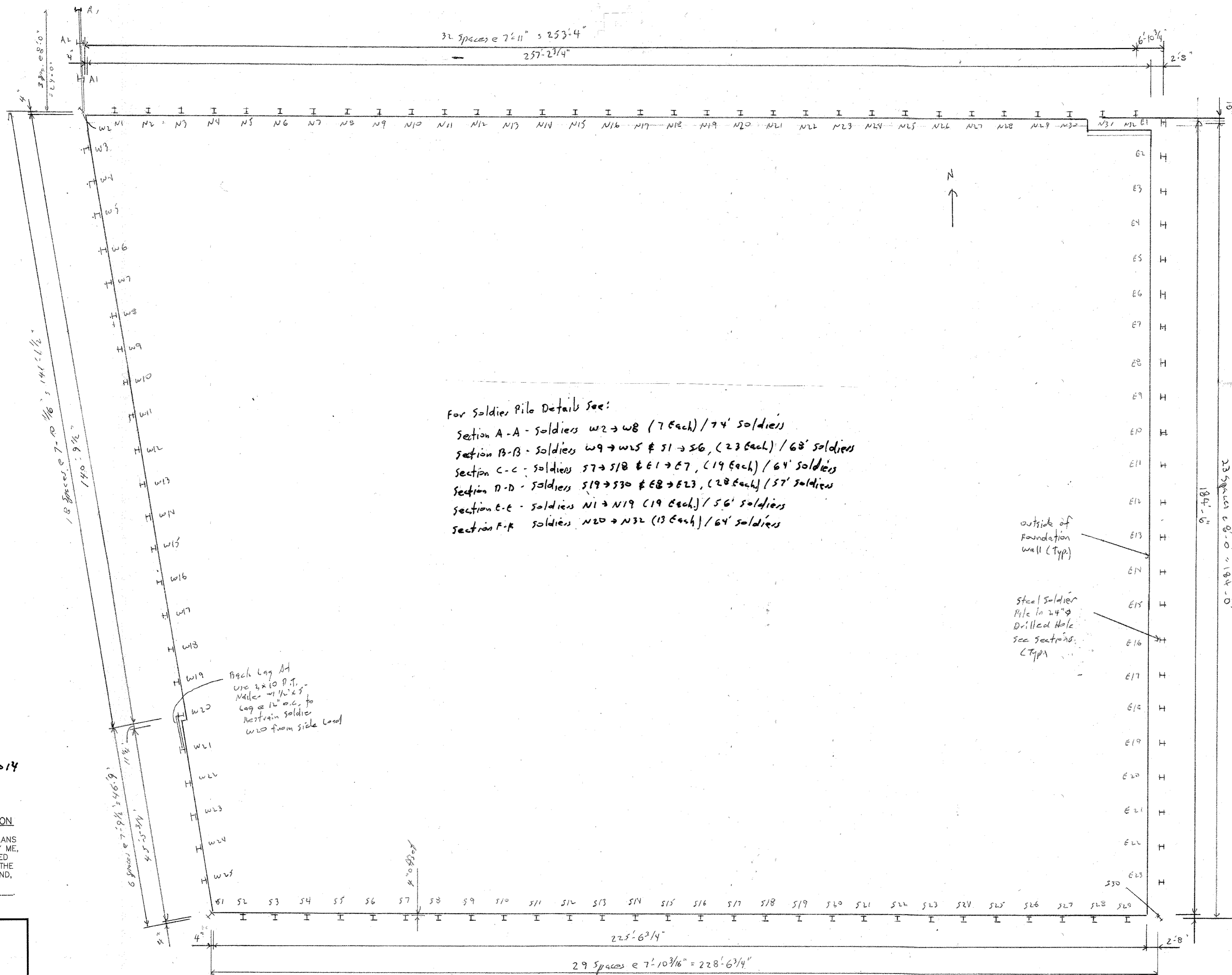
BLAKE STRUCTURAL

1518 Ridgely Rd, Ridgely, Md 21060 Ph 410-471-2155

PREPARED FOR AND OWNER PARCEL C-3:
 LPP INVESTORS LLC
 10211 WINCOPIN CIRCLE
 SUITE 100
 COLUMBIA, MD 21044
 Attn: DAVID COSTELLO
 410-740-9500

EXCAVATION SHORING PLAN NO ASBUILT
 PROPOSED APARTMENT, OFFICE, RETAIL & FITNESS BUILDING
 COLUMBIA TOWN CENTER SECTION 7 AREA 6
 PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
 INFORMATION 04/12/2014

SCALE	ZONING	SHEET
1/16" = 1'-0"	NT	15 OF 19
DATE	TAX MAP - GRID	
AUG, 2014	30 - 20	



For Soldier Pile Details See:

- Section A-A - soldiers w2 → w8 (7 each) / 74' soldiers
- Section B-B - soldiers w9 → w25 & s1 → s6, (23 each) / 68' soldiers
- Section C-C - soldiers s7 → s18 & e1 → e7, (19 each) / 64' soldiers
- Section D-D - soldiers s19 → s30 & e8 → e13, (28 each) / 57' soldiers
- Section E-E - soldiers n1 → n19 (19 each) / 56' soldiers
- Section F-F - soldiers n20 → n32 (13 each) / 64' soldiers

Back Lag At
w20
Use 2x10 P.T. -
Nails w/ 1/2" x 3"
Lag @ 12" o.c. to
restrain soldier
w/2 from side load

outside of
Foundation
wall (Typ.)

Steel Soldier
Pile in 24" x 9"
Drilled Hole
See sections
(Typ.)

Shoring Plan
N.T.S.

DESIGN CRITERIA

BUILDING CODES:

- 1.) IBC 2012. HOWARD COUNTY BUILDING CODE.

DESIGN STANDARDS:

- 1.) STEEL - AISC STEEL CONSTRUCTION MANUAL 13TH EDITION. ALLOWABLE WORKING STRESS METHOD.
- 2.) CONCRETE - AMERICAN CONCRETE INSTITUTE ACI318-11.
- 3.) SHORING & TIEBACKS - FHWA IF-99-015

GEOTECHNICAL PARAMETERS:

- 1.) 2/18/2014 PRELIMINARY GEOTECHNICAL INVESTIGATION BY HILLIS - CARNES ENGINEERING..

SOFTWARE:

- 1.) SHORING SUITE VERSION 8.10.

GENERAL NOTES

- 1.) WALLS DESIGNED FOR A LIVE LOAD SURCHARGE = 250 PSF
- 2.) OSHA APPROVED RAILING OR WALL EXTENSION TO BE PROVIDED AT TOP OF WALLS WHERE REQUIRED.
- 3.) STRUCTURAL STEEL FOR SOLDIERS IS TO HAVE A MINIMUM YIELD STRENGTH OF 50 KSI, AND SHALL BE EITHER ASTM A-572 OR A-992 GRADE 50. STRUCTURAL STEEL FOR PLATES TO BE ASTM A572 GRADE 50 OR EQUAL. STRUCTURAL STEEL FOR PIPE TO BE ASTM A53 WITH A YIELD STRENGTH OF 35 KSI OR BETTER.
- 4.) ALL WELDS TO USE EXX70 ELECTRODES.
- 5.) WOOD LAGGING TO BE 4" ACTUAL THICKNESS. LAGGING IS TO BE MIXED HARDWOOD AND IS TO HAVE A MINIMUM ALLOWABLE BASE BENDING STRENGTH OF 1000 psi.
- 6.) LAGGING TO BE INSTALLED TO THE LINES SHOWN ON THE ELEVATION DRAWINGS AND IS TO BE INSTALLED IN 4' HIGH MAXIMUM SECTIONS. EXCAVATION HEIGHT TO BE REDUCED TO 2' IF ANY UNRAVELING OF THE SOIL OCCURS DURING THE LAGGING EXCAVATION AND INSTALLATION. MIRAFI NON WOVEN FILTER FABRIC OR EQUAL TO BE PLACED BEHIND THE LAGGING. GAPS BEHIND THE LAGGING ARE TO BE FILLED WITH SOIL. A 3/4" THICK HARDWOOD SPACER IS TO BE PLACED BETWEEN EACH LAGGING BOARD AT EACH END OF BOARDS THROUGHOUT THE SHORING WALLS. LAGGING TO EXTEND NO MORE THAN 18" BELOW TIEBACKS UNTIL SAID TIEBACKS ARE INSTALLED.
- 7.) THE PROJECT SITE IS TO BE DEWATERED BY OTHERS.
- 8.) STEEL SOLDIERS ARE TO BE SOCKETED IN 24" DIAMETER HOLES DRILLED AND GROUTED AS USING 3 KSI MIN GROUT OR CONCRETE FOR THE SOCKET PORTION AND BACKFILLED WITH SAND FOR THE UPPER RETAINED PORTIONS.
- 9.) TIEBACKS TO BE ASTM A 416 X 270 KSI LOW RELAXATION STRAND OF 0.60" DIAMETER X 7 WIRE. NUMBER OF STRANDS TO BE USED AT EACH TIEBACK IS SHOWN ON THE SECTIONS. TIEBACKS TO BE PROOF TESTED TO 133% OF DESIGN LOAD PER AND LOCKED OFF AT 80% OF DESIGN LOADS AS SHOWN ON THE SECTIONS. TIEBACKS TO BE GROUTED WITH 4KSI GROUT. TIEBACK GROUT STRENGTH TO REACH 2500 PSI OF BETTER PRIOR TO PROOF TESTING.

SOLDIER PILE WALL MONITORING:

- 1.) DEFLECTION OF THE WALL TO BE MONITORED BY A 3RD PARTY ENGINEER BASED ON A MONITORING SYSTEM PROPOSED BY SAID ENGINEER.

SEQUENCE OF CONSTRUCTION:

- 1.) BENCH SITE AS SHOWN ON THE SHORING PLAN.
- 2.) INSTALL SOLDIER PILES.
- 3.) EXCAVATE AND LAG IN 4' LIFTS. INSTALL EACH LEVEL OF TIEBACKS AS EXCAVATION PROCEEDS LIMITING THE DEPTH OF EXCAVATION BELOW THE TIEBACK LEVEL TO 1'-6" MAXIMUM UNTIL THE TIEBACKS ARE LOCKED OFF.



8/25/2014

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18240, EXPIRATION DATE: 11/5/19

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: Maule M. Long III Date: 10/22/14

Chief, Division of Land Development: Victor S. Orndorff Date: 10/22/14

Chief, Development Engineering Division: Chad P. ... Date: 9-23-14

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 1/2/2014

BLAKE STRUCTURAL
11510 Ridgely Rd. Ridgely, Md 21060 Ph. 410-634-2455

NO.	DATE	BY	APPR.

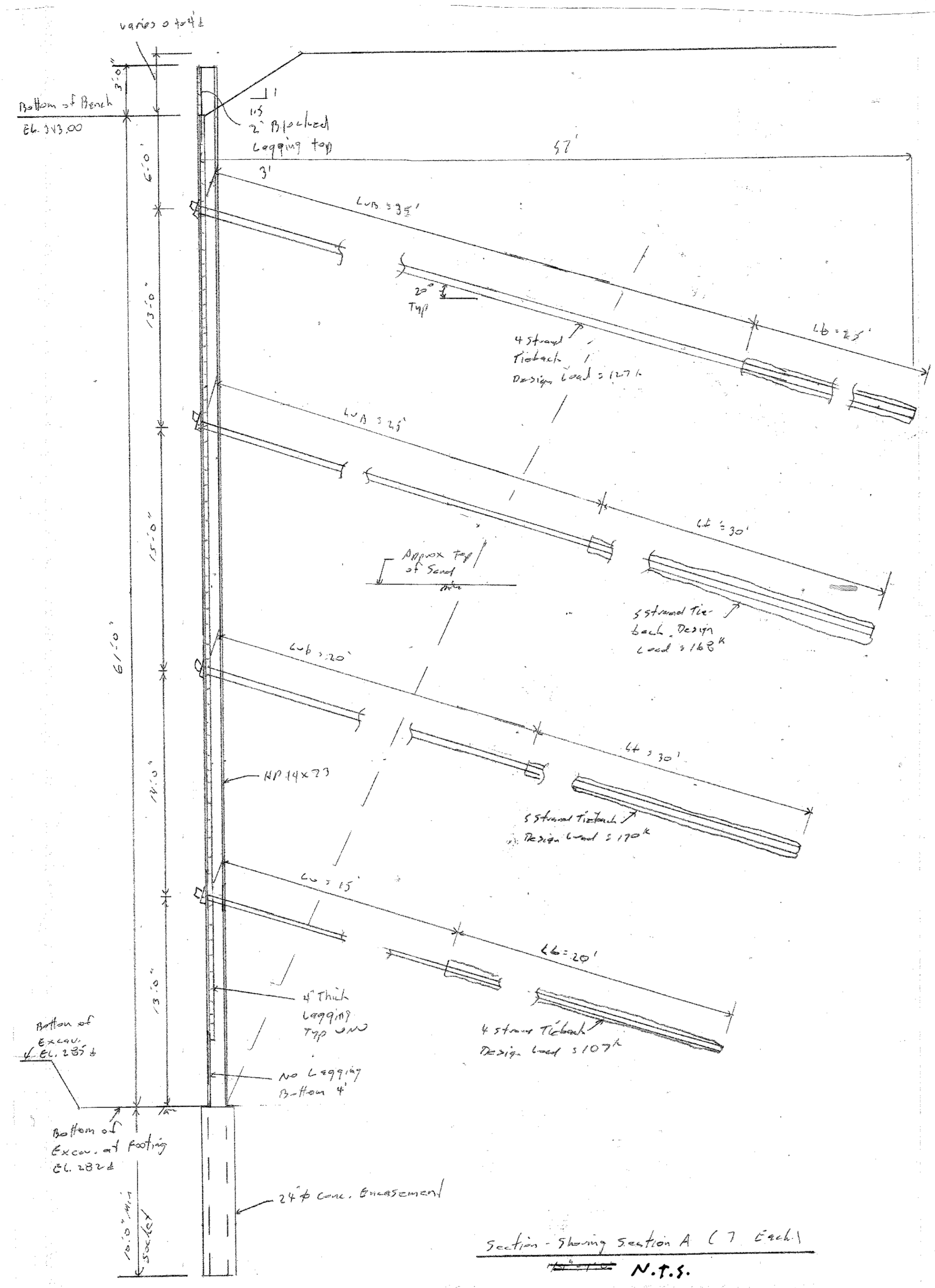
PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

SHORING PLAN INFORMATION 06/12/2017

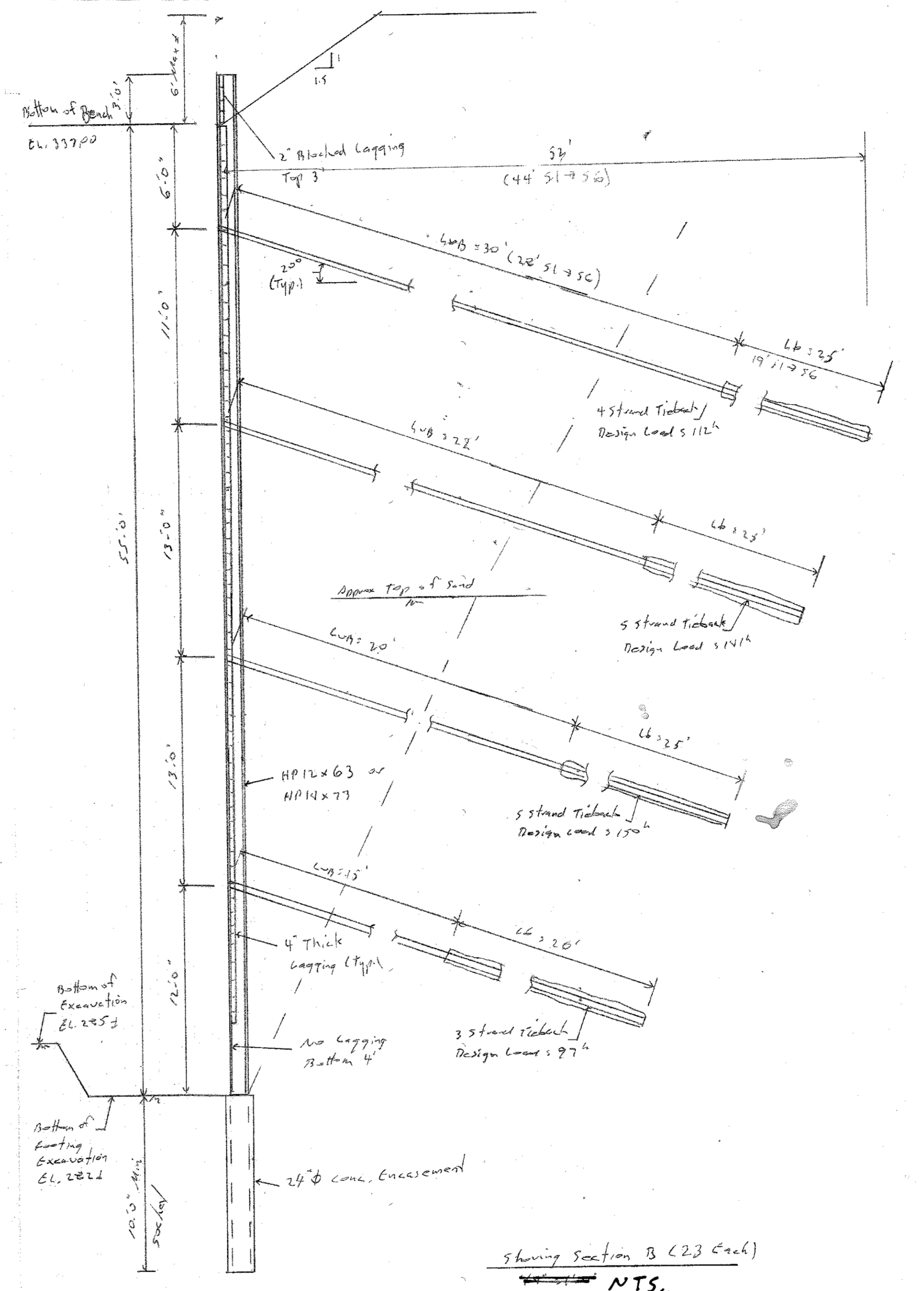
PROPOSED APARTMENT, OFFICE, RETAIL & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1

ELECTION DISTRICT No. 5

SCALE	ZONING	DATE	TAX MAP - GRID	SHEET
	NT	AUG., 2014	30 - 20	16 OF 19



Section - showing Section A (7 Each)
N.T.S.



Showing Section B (23 Each)
N.T.S.



8/25/2014

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16290, EXPIRATION DATE: 11/15/14

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Frank McLaughlin 10/22/14
 Director
Robert Devoe 10/27/14
 Chief, Division of Land Development
Chad Edwards 9-23-14
 Chief, Development Engineering Division

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 1/2/2014

BLAKE STRUCTURAL
12510 Ridgely Rd. Ridgely, Md 21000 Ph. 410.681.2450

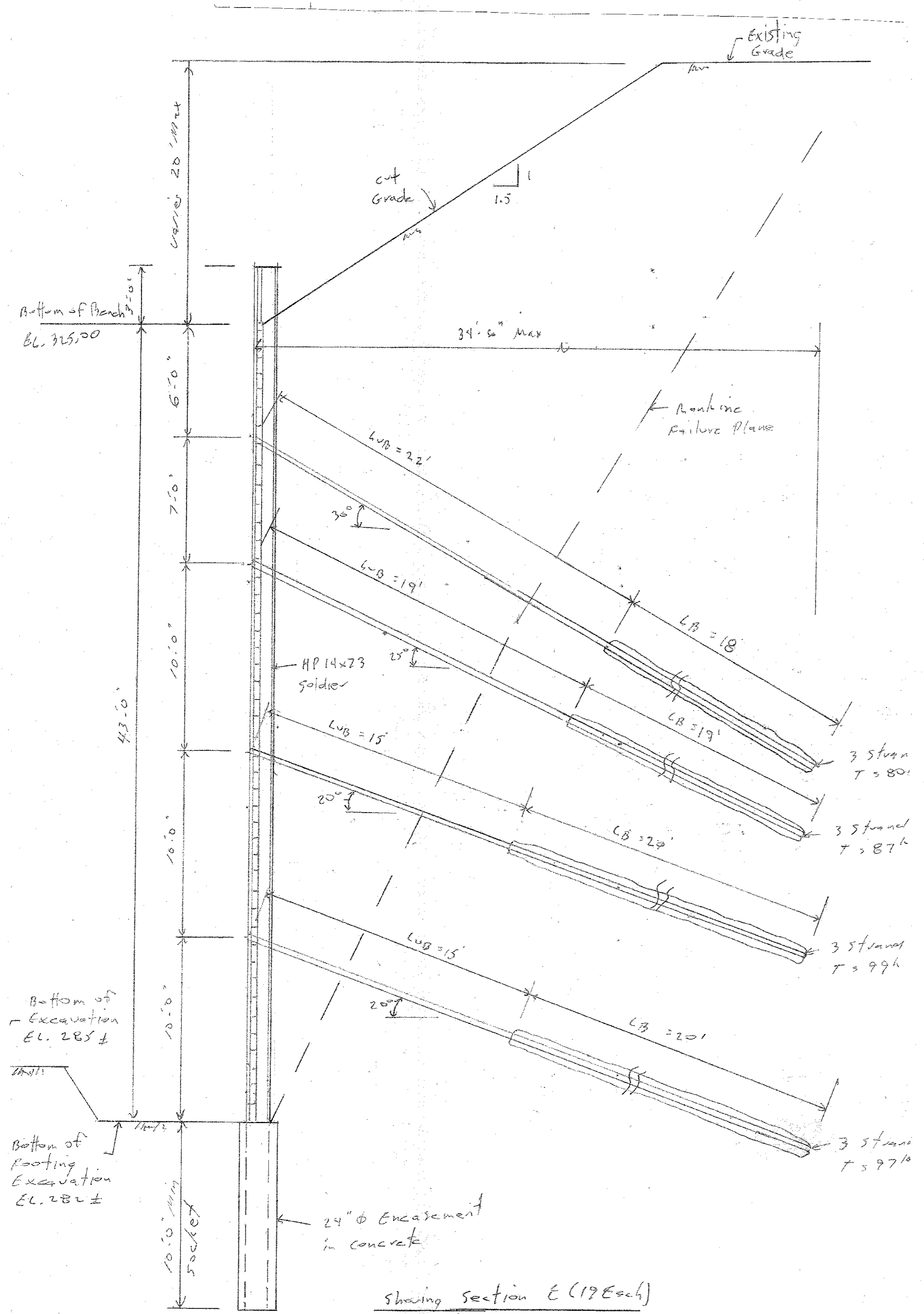
REVISION	DATE	BY	APPR.

PREPARED FOR AND OWNER PARCEL C-3: LPP INVESTORS LLC 10211 WINCOPIN CIRCLE SUITE 100 COLUMBIA, MD 21044 Attn: DAVID COSTELLO 410-740-9500

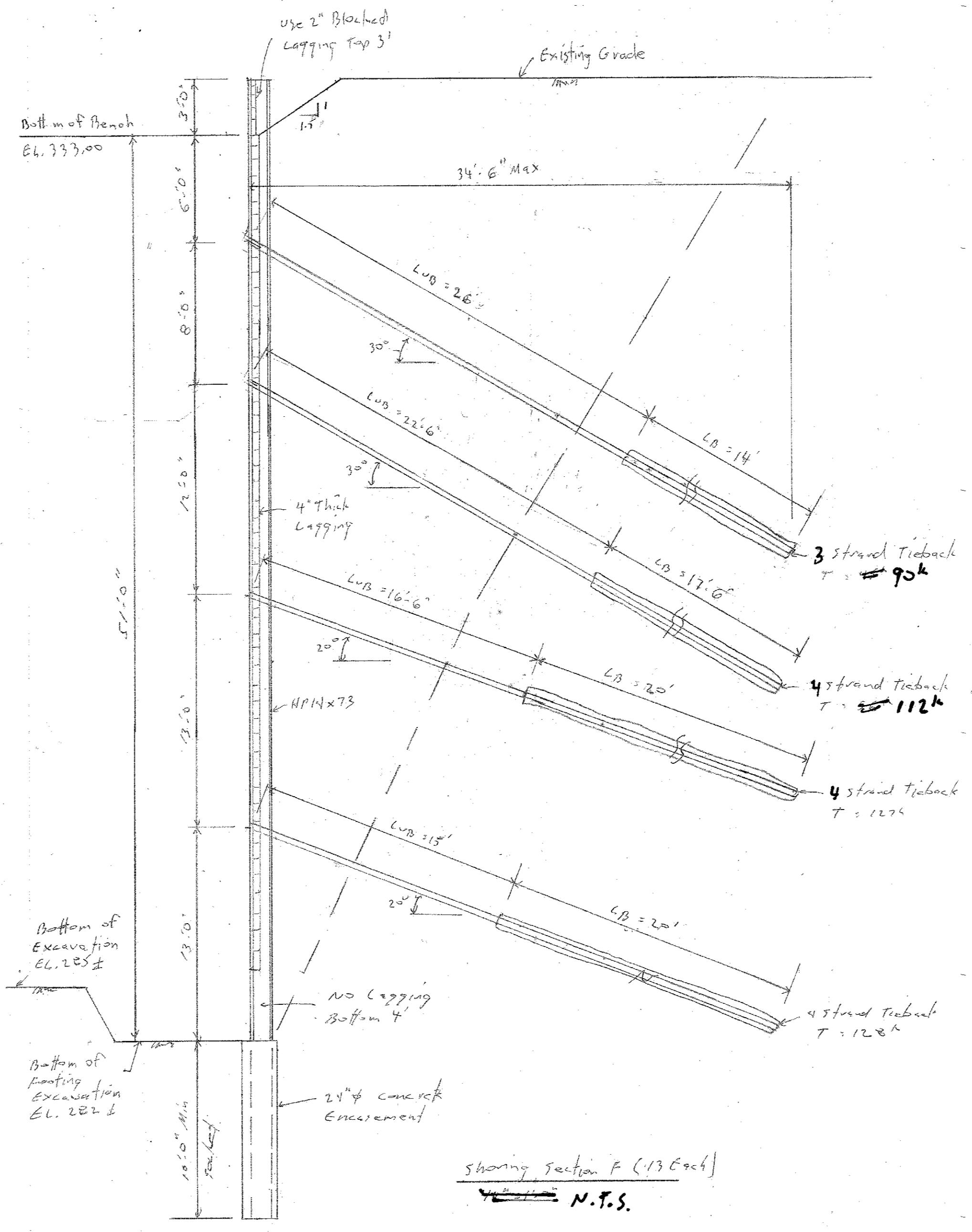
ANCHORING DETAILS
PROPOSED APARTMENT, OFFICE, RETAIL & FITNESS BUILDING
COLUMBIA TOWN CENTER
 SECTION 7 AREA 6
 PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	DATE	TAX MAP - GRID	SHEET
	NT	AUG., 2014	30 - 20	17 of 19

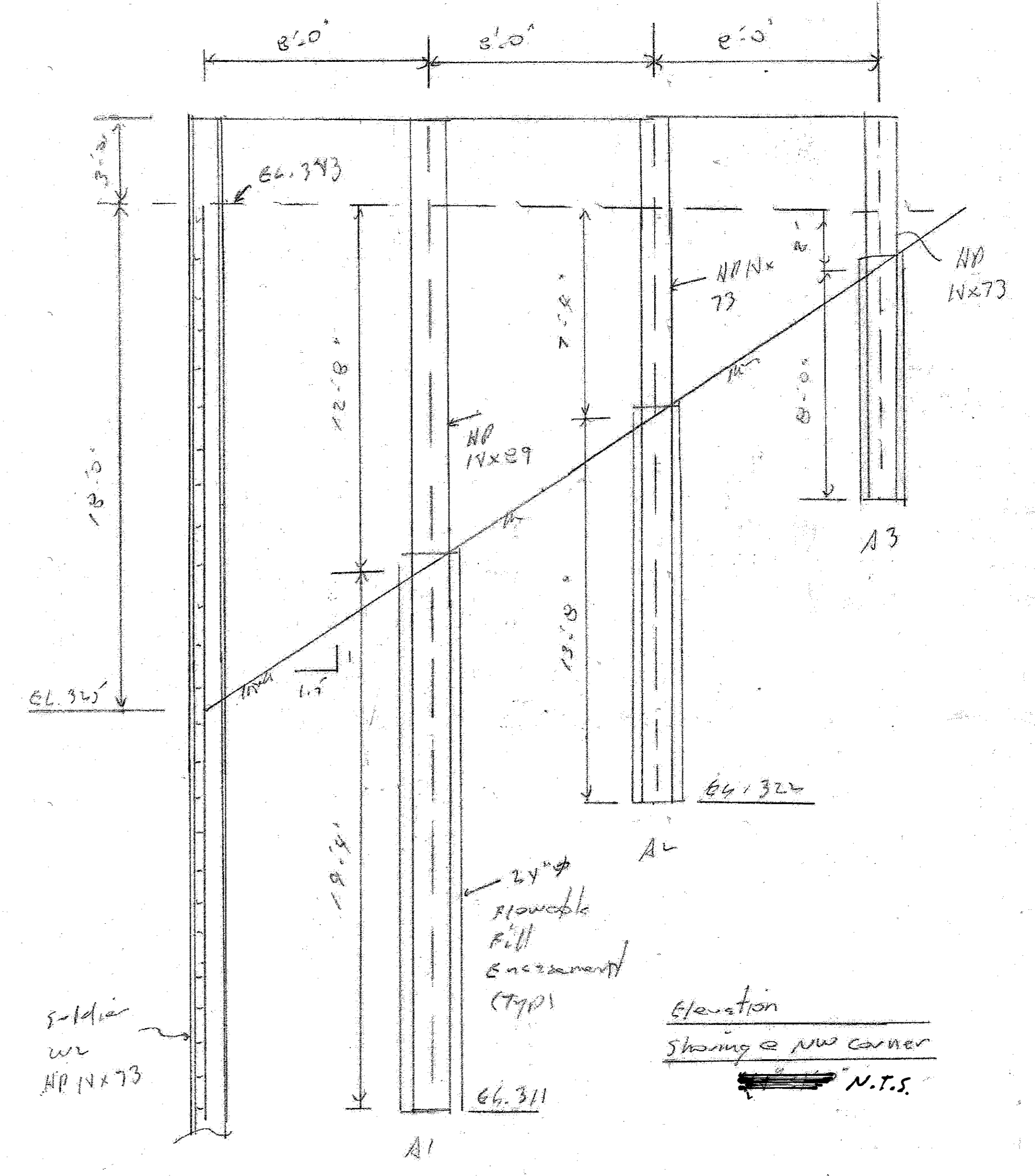
SDP 05-90



Showing Section E (19 Each)
N.T.S.



Showing Section F (13 Each)
N.T.S.



Showing Section A (11 Each)
N.T.S.

LICENSE NO. _____
EXPIRATION DATE: _____



Professional 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 Maryland. No. 16246 Expiration Date: 11/5/14

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 David A. Blake 10/20/14
 Director Date
 Keith S. Lusk 10/23/14
 Chief, Division of Land Development Date
 Chad E. Clark 9-23-14
 Chief, Development Engineering Division Date

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 1/2/2014

BLAKE STRUCTURAL
15115 Ridgely Rd. Ridgely, Md 21060 Phone 410-245-2455

NO.	DATE	REVISION	BY	APPR.

PREPARED FOR AND OWNER PARCEL C-3:
LPP INVESTORS LLC
10211 WINGPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

PROPOSED APARTMENT, OFFICE, RETAIL & FITNESS BUILDING
COLUMBIA TOWN CENTER
SECTION 7 AREA 6
PARCELS C-2, C-3, B, D-1 AND OPEN SPACE LOT 1
HOWARD COUNTY, MARYLAND

SCALE	ZONING	DATE	TAX MAP - GRID	SHEET
	NT	AUG., 2014	30 - 20	19 OF 19

NO ASBUILT

CHORING DETAILS INFORMATION 06/12/14