



ENGINEERS AND SURVEYORS INSTITUTE
 “A public/private partnership”
CITY OF ALEXANDRIA, VIRGINIA
MINIMUM SUBMISSION REQUIREMENTS
SITE PLAN

PROJECT NAME: _____
 PROJECT ADDRESS: _____
 TAX MAP REFERENCES: _____
 ENGINEER: _____ E-MAIL: _____
 FIRM: _____
 ADDRESS: _____
 PHONE: _____ FAX: _____
 REVIEW DATE _____ ESI STAFF ENGINEER _____

Note: The following sheets and information are required for every submission. Additional sheets and information should be provided where necessary to demonstrate compliance with City requirements or conditions of approval. Review dates are determined by routing from Planning & Zoning

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	REQUIREMENTS FOR EACH SHEET:					
	Engineer/Surveyor Certificate provided and signed.					1
	Print size shall not exceed 24" x 36" and all sheets shall be the same size					2
	Scale no less than 40' to 1" (20' or 30' to 1" preferred), with scale identified on each sheet					3
	City approval signature block in same place (lower right corner) on each sheet (see attachment for configuration and size of block)					4
	Date, scale and north point with reference to source of meridian					5
	Name, address, signature and registration number of professional preparing the plan on each sheet					6
	Legend of symbols					7
	Date the plan was prepared on each sheet					8
	COVER SHEET					9
	Name and address of the developer and of the owner(s) of record					10
	A narrative description of the proposed development					11
	Location map with the site shown in relation to the nearest intersection of two or more streets					12
	Index to plan sheets					13
	Key to plan sheets if more than one sheet is needed to show the whole site					14
	Total area included in the site plan, total area of tax parcel, total existing and proposed impervious area on the tax parcel, and total area that will be disturbed during construction (all expressed in square feet and acres)					15
	A list of all special use permits and zoning modifications or waivers approved with the preliminary plan					16
	Building Code Analysis					

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Fire flow calculations					17
	Notes: Noise ESA Statement (amend accordingly) Wells Contaminated Lands E&S Table of all symbols and abbreviations utilized in the plan set.					18
	Affordable housing information.... Housing Trust Fund					19
	ZONING TABULATIONS (May be provided on cover where sufficient space exists) For each element, list zoning ordinance requirement, number approved on preliminary plan and number proposed on final plan, if different. **Note:** If the proposed development includes multiple lots, the zoning tabulation information must be provided for each individual lot unless all the lots will be consolidated in conjunction with the proposal.					20
	Zoning of the site					21
	Existing uses on the site					22
	Proposed uses for the site					23
	Lot area (and minimum lot area under zoning, if applicable)					24
	Number of dwelling units (list by number of bedrooms for multifamily)					25
	Units per acre for residential					26
	Gross square feet (GSF) of building area*, total and listed by use (with parking listed separately) *Note: The gross square footage... party walls					27
	Net square feet (NSF) of floor area, total and listed by use					28
	Floor-area-ratio (existing if applicable, and proposed listed separately and combined)					29
	Open space, with ground level open space listed separately from other open space					30
	Average finished grade of each building					31
	Height of each building					32
	Yards; required and proposed listed separately					33
	Frontage; required and proposed listed separately					34
	Parking spaces (listed by compact, standard, and handicapped sizes and total)					35
	Loading spaces					36
	Existing and proposed trip generation					37
	DSP/DSUP CONDITIONS WITH PLANNING COMMISSION & CITY COUNCIL ACTIONS (Place this information on a separate sheet of the submission following the cover sheet)					38
	Copy of the approved DSUP/DSP conditions, with action, from the staff report for the project					39

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Copy of the City Department Comments containing Code Requirements from the staff report.					40
	PRELIMINARY SITE PLAN					42
	FINAL SITE PLAN <u>Include existing features to be retained and show location, dimension, size, height and elevation of:</u>					43
	Boundaries of zoning districts on the site					44
	Sidewalks, streets, alleys with widths labeled, and elevations					45
	Show the full right-of-way width and centerlines of all adjoining streets					46
	Existing and modified lane widths and uses (right turn, left turn, etc.).					47
	Existing and proposed Traffic controls including signs, markings and signals on a separate sheet if necessary (see Traffic Signal Plan, below)					48
	Maintenance of traffic plan					49
	Existing and proposed on-street parking locations and individual spaces when required					50
	Direction of traffic and volumes at all site entrances, exits and intersections					51
	Sight distance per AASHTO at all driveways and street intersections; horizontal and vertical					52
	Easements, covenants and reservations including emergency vehicle easements (EVE)					53
	Building restriction lines, highway setback lines, zone transition lines, vision clearances					54
	Property lines; show course and distance of each site boundary line					55
	Yard dimensions...setback requirements Dimensions of front, side and rear yards					56
	Buildings and structures, including optional decks and other projections such as canopies, roof overhangs; or maximum building envelope (where approved as envelope) showing outside dimensions, including height, and first floor elevations					57
	Stoops, steps and staircases					58
	Locations of building entrances and exits					59
	Sump pump and roof drain outfalls					60
	Locations of underground parking and the extent of related subsurface structures					61
	Dimensions of all on-site parking spaces indicating type (standard, compact or handicapped)					62
	Storm and sanitary sewer systems, including lateral lines, water mains and service lines, with size and owner of line indicated; indicate direction of flow; profiles; calculations for storm and sanitary					63
	Gas mains and service lines; with size of line and owner of line indicated					64
	Fire hydrants, water mains and service lines; with size of line and owner of line indicated					65
	Electric, telephone, cable and all other utilities on the property; identify owners					66
	Transformers, switchboxes, cable boxes, telephone pedestals, and other surface features of utility systems					67
	Light poles and fixtures on-site and on adjoining rights-of-way					68

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Driveways, entrances, exits, parking areas; show parking spaces by type (standard, compact and handicap) and indicate the number in each bay and the total count					69
	Curb radii at intersections and driveway entrances for public and private streets and alleys, and within parking lots					70
	Sidewalks, bike and walking trails on sites and on abutting streets or public property/easements					71
	Recreation areas, swimming pools					72
	Watercourses, bodies of water, wetlands and limits of flood plains					73
	Resource Protection Areas as defined in Article XIII of the Zoning Ordinance					74
	Significant geological features					75
	Proposed grading shown with 2' contours on the subject property and on adjacent parcels for sufficient distance to indicate the relationship of the site to off-site terrain					76
	Slopes, terraces and retaining walls, including elevations of level areas and tops and bottoms of walls and exterior stairways and ramps					77
	Plans for collecting and depositing stormwater ...BMP data blocks (2)					78
	Indicate elevations at the base of all utility structures other than individual poles, such as fire hydrants and transformers					79
	Provide rim elevation and invert elevations of all piping at manholes					80
	Elevations of streets and alleys					81
	Total area that will be disturbed during construction (expressed in square feet, acres, and delineated accordingly)					82
	Roadway alignment data					83
	LANDSCAPE PLAN (See "Landscape Guidelines" published by the Department of Planning and Zoning, City of Alexandria.)					84
	Buildings, streets, driveways, paved areas and other structures					85
	Utilities and Utility easements					86
	Locations of off and on site lighting including street lighting					87
	Existing vegetation...caliper					89
	Street trees and natural vegetation to be retained; include locations, size and species.					90
	Proposed tree protection locations and details					91
	Proposed trees and landscaping, including within public right-of-ways					92
	Location and dimensions of areas to be landscaped (including within public right-of-ways), specifying the location, names, species, caliper, and size of proposed individual trees, shrubs, and ground cover plants (indicate initial height for trees and shrubs, initial width for shrubs, and initial spread for groundcover plants)					93
	Tabulation of required, existing and proposed crown coverage					94
	Tree and shrub planting details					95
	Landscape planters on underground parking					96
	Total area that will be disturbed during construction (expressed in square feet, acres, and delineated accordingly)					97
	<u>The following notes:</u>					
	All materials' specifications shall be in accordance with the industry standard for grading plant material-The American Standard for Nursery Stock (ANSI Z60.1).					98

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Maintenance of all trees and landscape materials shall conform to accepted industry standards set forth by the Landscape Contractors Association, American Society of Landscape Architects, the International Society of Arboriculture, and the American National Standards Institute.					99
	LIGHTING PLAN					100
	Buildings and structures					101
	Location of all existing and proposed lights, including street lights and building lights.					102
	Type of fixture					103
	Mounting height					104
	Strength of fixture in lumens or watts					105
	Manufacturers' specifications for fixtures					106
	Photometric calculations (point lighting plan) accounting for proposed street trees					107
	EROSION AND SEDIMENT CONTROL PLANS <u>Erosion and Sediment (E&S) Control Plan Sheets showing:</u>					108
	Two-phase plan for sediment and erosion control					109
	Narrative phasing plan including demolition and sequence of construction activities					110
	All appropriate details of erosion and sediment control measures (must meet Virginia Erosion and Sedimentation Control Handbook (VESCH) standards)					111
	Sources of water for construction entrance washdown					112
	Grading for drains and traps for construction entrance runoff					113
	Phase 1 drainage area map indicating existing conditions drainage area, runoff coefficients and peak discharges for 2- and 10-year storms					114
	Show and list appropriate control measures defined for each drainage area					115
	Total area that will be disturbed during construction (expressed in square feet, acres, and delineated accordingly)					116
	Phase 2 drainage area map indicating drainage areas to selected BMPs, runoff coefficients and peak discharges for 2- and 10-year storms					117
	Identify areas having different ground covering materials (i.e. concrete, asphalt, gravel, turf, crushed stone, etc.)					118
	Delineate any wetlands or Resource Protection Areas (RPA)					119
	Legend for line types (must be in accordance with VESCH)					120
	Grading for sediment traps and basins					121
	Tabulate drainage area, wet volume, dry volume, and clean-out volume for traps and basins with respective elevations					122
	Temporary and permanent seeding mixtures					123
	Critical areas					124
	Soils description					125
	Maintenance practices to be employed					126
	Phasing					127
	Standard notes					128
	Stockpiling procedures					129
	Contaminated soils					130

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Calculations for: Traps Basins Dewatering structures Culvert protection Culvert sizing					131
	References to any needed VPDES permit and indication that a copy will be filed with the City					132
	References to any needed POTW permit and indication that a copy will be filed with the City					133
	Geotechnical information					134
	STORMWATER MANAGEMENT/BMP SHEETS (See Article XIII of the Zoning Ordinance for guidance on water quality calculations) Water Quality Impact Assessment					135
	Location and description of RPA components					136
	Location and nature of RPA encroachment					137
	Type and location of proposed BMP, with supporting calculations					138
	In addition, where a MAJOR assessment is required: Hydrogeological element Landscape plan supplement Ecological impact analysis					140
	<u>Stormwater Management Sheets</u> Outfalls located and determined to be adequate for proposed discharge Pre and post development calculations					141
	Drainage divides on-site identified and delineated					142
	Show flow routing to detention					143
	Calculate HGL and depict on profiles showing 2 feet of freeboard					144
	Computation and display of inlet flow					145
	Show full flow calculations					146
	Demonstrate that velocities are no less than 2 FPS and no more than 20 FPS					147
	Use N-values <36"=0.015 & >or=36" 0.013					148
	Show erosive velocity at outfalls					149
	<u>BMP Sheets</u>					150
	Water Quality Volume (WQV) computation (in cubic feet and acre-feet)					151
	Drainage area map with scale and north arrow indicating the area drainang to the selected water quality BMPs					152
	Water Quality Worksheets A or B and C					153
	City standard water quality BMP data blocks (2)					154
	BMP detail including WQV default elevation					155
	Surface appurtenance casting detail					156
	Signage detail for surface BMP					157
	Standard BMP notes					158
	Waiver approval letters					159
	PROPOSED SIGNING AND MARKING PLANS					160
	Street layout, including curb lines or edge of pavement, sidewalks, handicap ramp locations					161

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Existing pavement markings, noting markings to be eradicated					162
	Proposed new pavement markings, including pattern, width and color					163
	Dimensions of proposed lane widths, and parking lanes and spaces					164
	Pavement marking materials specifications, including type and thickness					165
	Existing signs to be retained, removed or relocated					166
	Proposed new traffic signs, including locations, MUTCD sign codes where applicable, and special legends					167
	Sign schedule including sign code, size, legend, sheeting and sign blank specifications, special installation requirements					168
	TRAFFIC SIGNAL PLAN Intersection layout showing poles, mast arms, signal head, detector and controller locations and specifications Intersection lane use and markings Vehicular and pedestrian signal head configurations					169
	Signal phasing and sequence charts and initial timing plans					170
	Location of power connection					171
	Cable and conduit layout, sizes and specifications					172
	Wiring size and specifications					173
	Interconnect details					174
	Specifications for poles, mast arms and pole foundations; pole foundation designs sealed by registered engineer					175
	FIRE SAFETY PLAN (See 'Water and Fire Requirements For Site Plans and New Construction' prepared and published by the City of Alexandria Fire/EMS Department					176
	Building foot prints, driveways, parking areas.					177
	Building entrances and exits					178
	Use group classification and type of construction (defined by USBC).					179
	Existing and proposed water main location and size					180
	Existing and proposed fire hydrant locations					181
	Available water pressure and flow capability, static pressure, residual pressure, flow in GPM					182
	Fire flow calculations in accordance with city standards that are prepared by a licensed engineer that determine the required fire flow for the project.					183
	Verification that the existing and/or proposed infrastructure is capable of providing the required fire flow shall be provided..					184
	Type of fire suppression or detection system to be provided (e.g. sprinklers, standpipes, smoke or heat detectors).					185
	Location and size of underground fire lines					186
	Location of fire department siamese connection (typically, street front of building)					187
	Height of building in feet and stories					188
	Identification of fire walls, tenant separations, etc.					189
	Topographical map relating grade and elevation to fire department connections.					190
	Location of all Emergency Vehicle Easements and of EVE signs outlining the EVE					191
	Emergency vehicle turnaround space for drive aisles in excess of 100 feet.					192

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	Fire ladder truck access to the front and rear of all buildings in excess of 50 feet in height.					193
	DETAILS (Details may be incorporated into relevant sheets if sufficient space is available.)					194
	Pavement sections					195
	Curbs					196
	Driveway aprons					197
	Handicap ramps					198
	Location and dimension of all handicapped parking spaces					199
	Sidewalks and plaza sections/details					200
	Signs					201
	Trash receptacles					203
	Two benchmarks					204
	Street typical sections					205
	Fences and walls, retaining walls					206
	THE FOLLOWING SHEETS ARE NOT REQUIRED TO BE PROVIDED IN EVERY SET. 3 COPIES OF EACH SHEET SHOULD BE PROVIDED SEPARATELY:					207
	DIMENSION PLAN (standard sheet size) The purpose of this sheet is to provide a "clean" sheet with limited information that can be utilized by the city's GIS and should contain the following info: parcels/property lines; 3 x,y coordinate pairs in state plane coordinates (NAD83) 50 scale (1:600) National Map Accuracy Standards; full right of way and centerlines of all adjoining streets; sidewalks, streets, alleys, driveways and parking lots; buildings and structures showing outside dimensions including height; entrances, including primary; and stoops, steps and staircases.					208
	OPEN SPACE EXHIBIT (The purpose of this sheet is to demonstrate to staff which areas were counted toward open space.) parcels streets, alleys, driveways, all other areas of paving buildings and entrances areas counted as open space, shaded and dimensioned with areas counted as usable open space identified tabulations of areas counted as open space and usable open space					209
	ARCHITECTURAL ELEVATIONS Elevations of each building face, to scale and with dimensions Label all building materials (Whole sections)					210
	WATER QUALITY IMPACT ASSESSMENT					211
	ARCHAEOLOGICAL ASSESSMENT					212
	BUILDING MASSING STUDY					213
	TRANSPORTATION IMPACT STUDY					214
	PRELIMINARY SUBDIVISION PLAT					215
	CLUSTER PLAN AND TABULATIONS					216
	ADDITIONAL ITEMS...PLANNING AND ZONING:					217
	CONTEXTUAL PLAN					218

Code Refer	Description:	Sheet #	OK	No	N/A	Line
	GARAGE LAYOUTS					219
	ELEVATIONS AND SECTIONS					220
	AFFORDABLE HOUSING PLAN					221
	Design Guidelines					223
	ADDITIONAL APPLICATIONS ...PROPOSALS					224