



CHAPTER 4

Standard Gates/Entries



Gate 1



Gate 1



Gate 3 - truck inspection



Gate 3



The signage at Gate 1 is outdated and difficult to read



Gate 3 signage resembles that at Gate 1, although overgrown landscaping covers the number

Major Gates

There are two major active gates on the base, Gates 1 and 3. There is also one inactive gate, Gate 2, and one used solely for ammunition truck entry, Gate 13. A number of minor gates within the installation control access to the ordnance storage area.

GATE 1

Gate 1 is located off of Route 238 and provides access directly to the main administrative and training district down Main Road. The canopy clearly identifies both the base name and the gate number. Gate 1 has been recently upgraded to meet current Antiterrorism/Force Protection (AT/FP) standards, and presents a positive face to the surrounding community. The signage, however, is outdated and does not give the appearance of a naval station. Imagery is totally lacking outside the gate, although shortly after entering the base a park is located along Main Road that has a large grouping of naval weapons imagery.

GATE 3

Gate 3 is located off of Boundary Road, and is where the pass office and the truck inspection station are located, making it the main visitor entrance. Like Gate 1, it has been recently upgraded to conform to current AT/FP standards. Signage at Gate 3 is identical to that at Gate 1, with no imagery identifying it as a Naval base. Many of the public functions, such as the Naval Exchange, chapel, and childcare center, are located near this gate, outside the secure perimeter.

Standard Gates/Entries



Prototypical major gate



Aerial view of prototypical major gate



Proposed gate signage

PROTOTYPICAL MAJOR GATE

The adjacent renderings illustrate the Navywide prototype for a typical gate to meet AT/FP standards and the architectural character/appearance for all future major gate improvement projects.

At NWSY, the gate structures should have a brown or bronze standing seam roof and fascia. The masonry should match the texture and color range of brick used at the gymnasium.

The fencing in the gate area should be constructed of decorative black metal pickets and brick that meet AT/FP standards.

Landscaping should be concentrated at the intersection leading to the gate and around the gate sign and imagery. Landscaping in the gate's approach and response zones should be limited and not interfere with any lines of sight or provide locations for hiding.

Signage that should be provided in front of the guardhouse has been shown for the minor gates. Similar signage with brick columns to match the gate structure should be placed before the approach zone to the gate. If applicable, the sign should have two faces so that it can be angled toward traffic approaching from opposite directions.

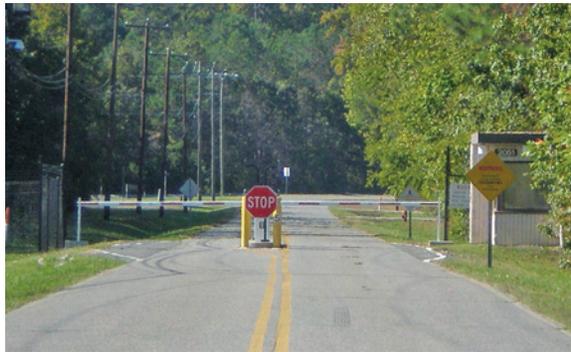
Major gates should have imagery located outside the approach zone, such as a flagpole with yardarms and/or anchors, firmly identifying the station as a naval installation.



Gate 2



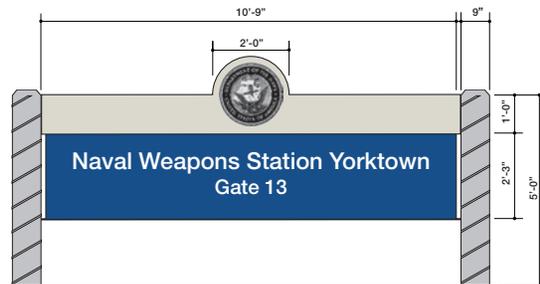
Gate 13



Entry into ordnance storage area



Pedestrian turnstile adjacent to Gate 3



Minor gate signage

Minor Gates

There are a number of minor gates located on NWS Yorktown. Gate 2, which is located off of the Colonial Parkway, is inactive, only opening in times of emergency or overwhelming need. The construction is well-suited for its location off of the Colonial Parkway, although little identifies it as a naval station gate. It has not been upgraded to current AT/FP standards, and the temporary barriers negate the positive image the attractive guardhouse presents to the Colonial Parkway. Gate 13 provides entry to the gate for ammunition trucks and to the station's only active rail lines. The gate is not highly visible and is used only by a small number of authorized personnel. It has not been thoroughly upgraded to meet current AT/FP standards.

Other minor gates within the secure perimeter of the station provide access to the ordnance storage area that makes up a large portion of Naval Weapons Station Yorktown. These are activated by swiping a card that is only available to authorized personnel. There is also an inactive pedestrian turnstile located near Gate 3 that, if used, would provide direct access from on-base housing to personnel support functions such as the gymnasium and the Naval Exchange.

PROTOTYPICAL MINOR GATE

Structures, fencing, and landscaping at Gate 13 should have the same appearance as the major gates only scaled-down in response to the anticipated traffic volume. Signage should be installed at the guardhouse. In most cases signs will not be required before the approach zone. No imagery is required at minor gates. Because Gate 2 is located off the Colonial Parkway, the guardhouse and signage should not match the types shown on this page, but should instead match the existing construction.

Standard Gates/Entries



View under Colonial Parkway to the pier



View down the pier



View from entrance to pier toward the station



Guardhouse at the pier

Waterfront Entries

Access to the pier is limited to authorized personnel and manned by a guard located in a guardhouse at the shoreline. Because the pier serves primarily as an ordnance loading and unloading port, ships do not call NWSY a home base. Because of this, there is no need for anything located at the pier to welcome sailors home.



Typical view along perimeter fence from Route 238, showing sparse screening



Typical view along perimeter fence from Route 238, showing large gaps in screening

Perimeter Appearance

Much of the perimeter of Naval Weapons Station Yorktown is heavily forested, providing a good buffer between the station and the surrounding community. Along Route 238, however, a series of warehouse buildings painted a stark white with little to break up their scale is highly visible. Screening is sparse due to large gaps in tree cover where rail lines once led. This gives a negative impression to the surrounding community. Painting the warehouses a more muted color with trim and accents used to break up the scale, combined with additional landscaped screening, would greatly enhance the image presented to the public.

The fencing around most of NWSY is black-painted chain link, which is appropriate for long borders. Near gates, decorative fencing is more appropriate. Additional information regarding perimeter fencing can be found in Chapter 1: Landscaping.

Standard Gates/Entries



CHAPTER 5

Parking Lots



Introduction

This chapter will discuss parking lot element design and maintenance. Specific design elements were chosen based on safety, functional use, maintenance and aesthetic value.

Parking lot design and maintenance can have a far-reaching impact on the overall flow of vehicular and pedestrian traffic. Incorrect design and maintenance can cause traffic congestion, increase the likelihood of accidents, decrease the response time of emergency and security personnel, cause ponding or flooding issues and be a general eyesore. To eliminate the occurrence of these negative effects, it is necessary to take into account current design standards, service areas, traffic flow patterns, AT/FP, aesthetics and motorist/pedestrian safety.

The proper maintenance of existing parking lots is just as important as their design. The effectiveness of features that were incorporated into a design can become degraded over time. Therefore, it is necessary to develop a maintenance program for parking lot elements that have a limited service life or require routine maintenance, such as pavement, curbing, drainage structures, pavement markings and signage.

Parking Lot Layout

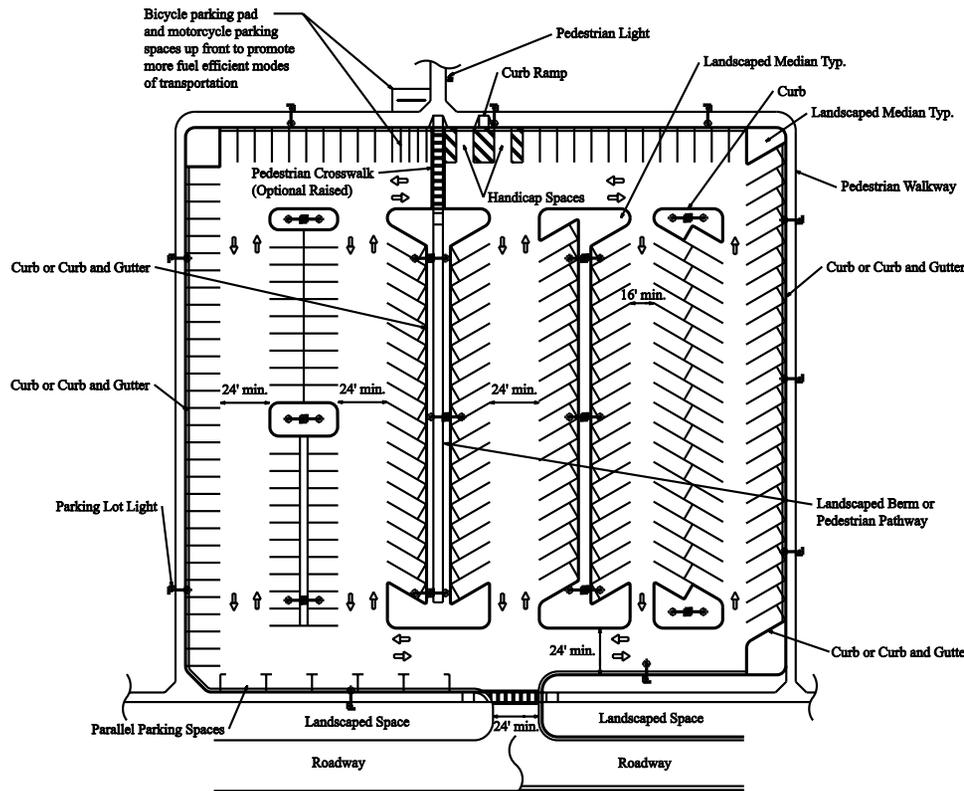
EXISTING CONDITIONS

Parking capacity at Naval Weapons Station Yorktown is generally sufficient, but not always ideally located in relation to the parking need. Due to the expansiveness of Naval Weapons Station Yorktown, it is necessary for each building site to include one or more adjacent parking lots that service it, instead of utilizing fewer area parking lots. The large amount of available space has allowed existing parking lots to be laid out in a rectangular fashion, and the existing parking lots are well delineated and separated from adjacent land use. Parking lots are configured with both angled and perpendicular parking spaces.

RECOMMENDATIONS

Parking lot layout is dictated by the amount of available space, the required number of parking spaces, and the parking lot usage. Not all sites allow for the construction of a perfectly square or rectangular parking lot. To maximize the available space, parking lots should, as closely as possible, resemble these shapes. If large vehicles utilize the parking lot, the standard drive aisle width should be increased accordingly and larger parking spaces should be incorporated into the design.

Parking configuration is an important aspect of parking lot layout (see diagram to the left). A parking lot with two-way drive aisles and perpendicular parking spaces will effectively provide the most available parking spaces. However, a parking lot configured with one way drive aisles and parking spaces at an angle of sixty (60) degrees is generally preferred because of the safety benefit that it provides. Parking lots with one-way drive aisles and angled parking spaces will:



- 60 degree angle parking, 9' wide, 18' deep parking spaces.
- 90 degree angle parking, 9' wide, 18' deep parking spaces.
- Parallel parking, 9' wide, 24' long parking spaces.
- 16' one way drive lanes, 24' two way drive lanes (min.)
- Landscaped medians could be used for bike racks or benches as an alternate to landscaping alone.
- Curb radii for passenger vehicles is 5'.
- Curb radii for truck accessible routes within parking lot will vary depending on design vehicle.

Typical parking lot configurations

Parking Lots



Example of a parking lot with inadequate separation from adjacent land use

- Improve safety by allowing bicyclists and pedestrians to better anticipate a vehicular conflict.
- Improve parking lot circulation.
- Improve vehicular maneuverability.
- Inherently provide the opportunity to create “green spaces”.

The needs of the area in which the parking lot serves should be prioritized and the configuration then designed accordingly. If limited space

is available on a site, a parking lot may be configured with both angled and perpendicular parking spaces to optimize land usage.

Parking lots should be physically separated with a border area from adjacent roadways and land uses (see bottom left picture). Where possible, this border area should contain a pedestrian walkway, landscaping for aesthetic purposes, or both. If space constraints prohibit the incorporation of a border area, delineation can be achieved through the use of features such as textured or alternate pavement types.

Parking lots should be designed to minimize unobstructed vehicle approaches to inhabited buildings and mitigate the risk of high-speed vehicle approaches. To accomplish this, parking lot design should meet the minimum standoff distance requirements as outlined in UFC 4-010-01. Long drive aisles should not be perpendicular to inhabited buildings and should be broken up by vegetation, bollards or raised islands. Other elements to consider are the use of speed humps, raised crosswalks or other traffic calming devices to lower the relative vehicular speed and create a safe and secure site.

The use of bollards in parking lots should be limited to those areas where there are no other alternatives. Raised islands can provide more green space, enhance vehicular safety and are more aesthetically pleasing than bollards. Where bollards are necessary, consider the use of bollards that incorporate a decorative element such as lighting, signage or vegetation while maintaining an effective level of security.



Example of a parking lot with proper separation from adjacent land use

Parking Lots



Example of a location where curbing could have been used



Example of the ineffective curbing at Building 31



Example of the old railroad track curbing at Building 31

Curb and Gutter

EXISTING CONDITIONS

Curbing or curb and gutter at Naval Weapons Station Yorktown are primarily used around building sites and the parking lots that service them. The existing curbing is typically constructed of concrete and is generally in good condition, although there are areas where it is deteriorated and in need of replacement. The curbing in the vicinity of building 31 is deteriorated and ineffective (see middle left picture). Additionally, old railroad track is used as an edge treatment in parts of this area (see bottom left picture).

RECOMMENDATIONS

Curbing or curb and gutter should be utilized in parking lots where site conditions allow. Utilizing curb in parking lots improves drainage patterns and prevents vehicles from traveling outside the designated limits of the parking lot. This aids in prolonging the pavement life by keeping motorists from driving on the edge, which is typically the weakest area of the pavement and first to show signs of distress. Combination curb and gutter should be used in areas that receive stormwater runoff. In parking lots where drainage flows to an inlet located toward the center of the parking lot, no gutter pan is necessary. However, when drainage inlets are located along a curbed area of the parking lot, it is more desirable for water to flow in a combined curb and gutter section than along a pavement/curb joint.

A gutter section is preferred because:

- Concrete gutter pans can be cast with precision and at flatter slopes than asphalt pavement.
- The edge of the gutter pan provides an absolute horizontal and vertical control point for the paving operation during construction.
- The steeper cross-slope of the gutter pan removes water more quickly from the travel way.
- Flow in a combined curb and gutter section is less likely to seep into the joint between the pavement and the curb, reducing the potential for subgrade failure during freeze/thaw cycles.
- A gutter section provides additional visual definition of the edge of the parking lot.

Maintenance of curbing should be performed on an as needed basis and prioritized accordingly. Curb deficiencies should be identified during the pavement inspection process (see pavement section) or through day-to-day operations.

The primary functional districts that warrant the use of curb are personnel and administrative support districts. Where site conditions preclude the use of curb in a parking lot, the use of parking chocks should be evaluated. If parking chocks are used they should be staked down to prevent movement.



Example of a poorly located light pole



Example of a striped island that could have been raised and landscaped

Islands

EXISTING CONDITIONS

Many of the parking lots at Naval Weapons Station Yorktown are considered small and have only one drive isle, providing few opportunities to incorporate islands into parking lot design. In the few larger parking lots with more than one drive isle, islands, both raised and striped, have been used. Utilities, for the most part, take advantage of the placement of islands to provide protection; however, in a few locations this is not the case. This can be seen in the lighting for the new transportation maintenance facility parking lot. The light poles were placed within parking spaces instead of within the adjacent striped island (see top left picture).

RECOMMENDATIONS

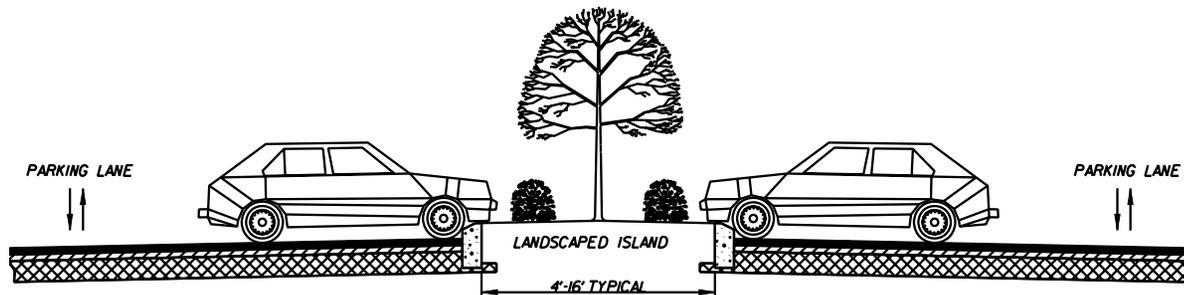
Parking lots should utilize islands to control traffic flow and prevent unwanted traffic movement. Where existing striped islands are used, consider converting to raised, landscaped islands, if drainage and site conditions permit (see middle left picture). Raised islands should typically be used in personnel and administrative support districts.

Raised islands are preferred because they:

- Reduce the amount of storm water runoff and improve the overall drainage system, thus acquiring Leadership in Energy and Environmental Design (LEED) credits.
- Create potential landscaped areas that would increase aesthetic value and “green space”.
- Increase pedestrian safety by providing pedestrian refuge areas.
- Create a physical barrier to prevent unwanted traffic movement.
- Provide protected areas to place lighting and large signs.
- Help facilitate improved traffic flow.

The width of a raised island will dictate its material of construction. If an island is too small, it impedes the maintenance of landscaping efforts. Therefore, if the width is less than four (4) feet through any part of an island, that section of the island should be constructed of concrete or designed with maintenance-free landscaping. To facilitate plant growth, a raised, landscaped island cannot be constructed on top of existing pavement, but must be excavated to the full depth of the pavement and backfilled with the proper soil if landscaping vegetation is to be used (see cross section to the left).

At-grade islands can be considered where existing conditions preclude the use of raised features, such as in waterfront or industrial districts. Striped islands may be preferred in these locations, depending on the nature of the vehicles that are to travel the parking lot and how the parking lot is to be used. There are specific locations where the manner in which the parking lot drains will dictate whether or not a raised island can be installed. In these locations, the site conditions must take precedence over all other design considerations.



Typical island

Parking Lots



Example of an ADA compliant curb ramp



Example of the narrow walkways around Building 31



Example of a deteriorated walkway that abruptly ends

Pedestrian Walkways

EXISTING CONDITIONS

The existing pedestrian walkway system on Naval Weapons Station Yorktown is limited and does not promote intra-building travel. Buildings along Main Road between Gate 1 and building 1959 are linked by a pedestrian walkway that parallels the roadway. Most other pedestrian walkways are limited to their specific building site. Along Longfellow Road, in the vicinity of Gate 3 and at Main and Spring Roads, are areas that exhibit high pedestrian traffic. Existing pedestrian walkways are primarily constructed of concrete with a few patches of asphalt. Curb ramps are provided for in nearly all locations where a raised walkway ends as required by the Americans with Disabilities Act (ADA) (see top left picture). The walkways in the vicinity of building 31 are too narrow and in need of replacement (see middle left picture).

RECOMMENDATIONS

At a minimum, pedestrian walkways should be laid out in order to facilitate proper pedestrian movement between common points of interest. Walkways that are used for recreational walking should be designed with a meandering layout for additional aesthetic value. The pedestrian walkway system should be designed to promote walking as opposed to driving. This will:

- Reduce the amount of vehicular traffic.
- Create a safer environment for drivers and pedestrians.
- Increase the ease of travel for security and emergency personnel.
- Facilitate the health and well-being of personnel.

Pedestrian walkways in parking lots may vary between 4 ft (1.2 m) and 8 ft (2.4 m) wide, depending on the amount of pedestrian traffic.

Where space is constrained, a smaller walkway width is sufficient. Where pedestrian traffic is higher, a larger walkway width is desirable (See Chapter 1 for specific walkway widths).

Crosswalks should be provided wherever a pedestrian walkway crosses a roadway or a drive isle within a parking lot, and should be as short and as direct as possible. It is recommended that a crosswalk be perpendicular to the roadway or drive isle to minimize the duration of potential vehicle conflict. At a minimum, crosswalks should be clearly marked in compliance with the Manual of Uniform Traffic Control Devices (MUTCD). Raised crosswalks should be considered in parking lots that entertain large volumes of pedestrian traffic. Raised crosswalks function as a safer area for pedestrians to cross traffic because they are more visible and serve as traffic calming devices. Curb ramps should be provided at all locations where a raised walkway ends to comply with ADA regulations.

Stamped pavement, colored pavement, concrete or brick walkways are appropriate construction materials for pedestrian walkways in personnel and administrative support districts. The colors and styles of stamping and brickwork should be consistent with existing pathways or be based on the naturally existing colors of the area. Special consideration should be given to material selection to further delineate a crosswalk. Crosswalks that are constructed of an alternate pavement type or stamped or colored pavement are not only aesthetically pleasing, but they provide more of a visual warning for drivers. In waterfront or industrial districts, utility should supersede aesthetics. Due to increased wear and tear found in these functional districts, a more durable walkway material, such as concrete, should be used in the construction of pedestrian walkways.

Parking Lots

Pavement

EXISTING CONDITIONS

Pavement at Naval Weapons Station Yorktown is primarily constructed of asphalt. A large amount of paving has recently been completed and because of this, most of the existing pavement is in relatively good condition. However, adjacent to building 31 the pavement is exhibiting transverse and reflection cracking.

RECOMMENDATIONS

Maintenance is an important aspect of a pavement's life. By conducting preventative maintenance, a pavement's life can be significantly extended and overall maintenance costs can be reduced. In order to effectively accomplish this, a proper maintenance program should be developed and implemented. This includes the following steps:

- Develop a pavement inspection schedule (this is usually done once every 1-2 years).
- Conduct a pavement inventory with a map of pavement areas that defines pavement type, structure, drainage features, use, age, and priority for maintenance.
- Develop or adopt an index for identifying pavement stresses and maintenance requirements.
- Inspect the pavement noting the location and type of all pavement stresses.
- Based on the pavement inventory and inspection results, prioritize maintenance efforts to maximize cost effectiveness.

Maintenance should be performed on the pavement surrounding building 31. See IAP project #5, Chapter 7, for more information.

The selection of pavement for a parking lot is based on the following factors:

- Traffic volume and type.
- Environment (soil characteristics and weather).
- Past performance of pavements in the area.
- Availability of materials.
- Adjacent existing pavement type.
- Construction (stage construction, speed of construction, accommodating traffic and ease of replacement).
- Initial and life cycle cost.
- Maintenance costs.
- Recycling existing pavement.

- Safety (characteristics of the wearing course, reflectivity and non-skid surface).

Parking lots in personnel and training/administrative support districts should be designed with an asphalt pavement. Consider the use of pervious pavement to obtain LEED points for a project. In waterfront and industrial districts, a more durable material such as Roller Compacted Concrete (RCC) should be considered in parking lot design if heavy vehicle loadings are expected. In any location, however, a lifecycle cost analysis should be completed to facilitate the selection of a pavement type.

PAVEMENT SELECTION CRITERIA

TYPE	ADVANTAGES	DISADVANTAGES	USAGE
ASPHALT	Lowest installation cost; quick and easy to install	Low service life compared to concrete; high maintenance cost	General purpose; Personnel and Training/Administrative Support Districts
ASPHALT OVER CONCRETE	Longer service life, more durable than asphalt alone; surface less prone to cracking and damage due to freeze-thaw cycles	High installation cost; more complicated to install	Personnel and Training/Administrative Support Districts, low level Industrial Districts
CONCRETE			
REINFORCED	Resistant to cracking/controlled cracking freeze-thaw cycles; greater service life than asphalt	High installation cost	Industrial and Waterfront Districts
UN-REINFORCED	Greater service life than asphalt	Prone to cracking during freeze-thaw cycles; moderately expensive	Industrial and Waterfront Districts
ROLLER COMPACTED	High durability, designed for repeated heavy loading, long service life	Very high installation cost	Industrial and Waterfront Districts
PERVIOUS	Obtain LEED points for a project; reduce size/cost of stormwater drainage systems and stormwater management areas	Should not be used in areas with high pollutant loads; very high installation cost; lower load bearing capacity	Personnel Support and Training/Admin. Support Districts

Parking Lots

Drainage/Storm Water Management

EXISTING CONDITIONS

Naval Weapons Station Yorktown is situated in gently rolling coastal terrain adjacent to the York River. There are two inlets from the York River that penetrate the perimeter of the installation (Felgates Creek and Indian Field Creek) as well as a number of ponds. There is a great deal of terrain relief found at Naval Weapons Station Yorktown, which aids in its drainage.

In developed areas, Naval Weapons Station Yorktown benefits from a closed drainage system. In more rural areas, runoff is conveyed into ditches, many of which are not well defined. Stormwater is conveyed through ditches or a closed drainage network and outfalls at a number of locations which are marked with signage. Several stormwater management ponds and pump stations exist on Naval Weapons Station Yorktown. Stormwater management is currently not an issue.

RECOMMENDATIONS

Appropriate drainage should be provided in all parking lots. All drainage designs should consider the possibility of a future increase in impervious area and volume of water. Water quality elements should be addressed accordingly and incorporated into any new design. Drainage outfalls should be designed and placed according to appropriate standards and all water should be treated as necessary. The Chesapeake Bay Preservation Act mandates higher design standards for water quality in stormwater management.

Proper pavement grading is paramount in attaining good drainage and reducing the chance of pavement damage. Low spots that are created during pavement installation or during normal wear and tear can exacerbate pavement deterioration by creating areas of ponded water that have the potential to weaken the subsurface structure (see top left picture). Consider the use of an underdrain when replacing a paved area. While slightly more expensive, an underdrain can significantly extend the life of a pavement by channeling subsurface water away from a pavement structure. This will reduce the likelihood of freeze-thaw damage and potentially extend the pavement life.

Routine debris and sediment removal should be performed at all storm drain inlets, storm drain piping and along all curb lines. Debris accumulation along drainage paths can greatly reduce the capacity of a drainage network and cause unnecessary flooding or ponding of water that can be detrimental to pavement and foundations (see bottom pictures).



Parking lot with deteriorating pavement caused by poor drainage



Example of a clogged drainage structure



Example of a clear curb cut for drainage

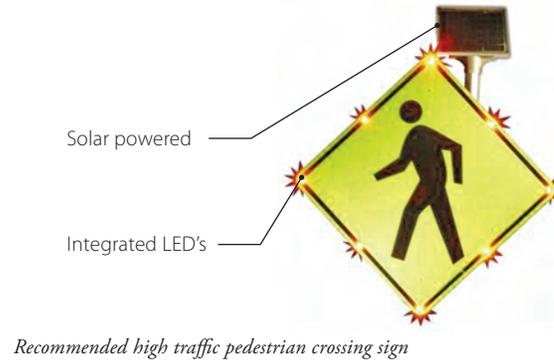


Example of a blocked curb cut

Traffic Control Devices

EXISTING CONDITIONS

Most of the MUTCD signage on Naval Weapons Station Yorktown is clear, concise, in good condition and mounted on U-channel posts. Customized signage is used in many parking lots to designate reserved parking spaces. Pavement markings on Naval Weapons Station Yorktown are constructed of both paint and thermoplastic. In many areas the existing pavement markings are worn, unserviceable or missing.



Recommended high traffic pedestrian crossing sign



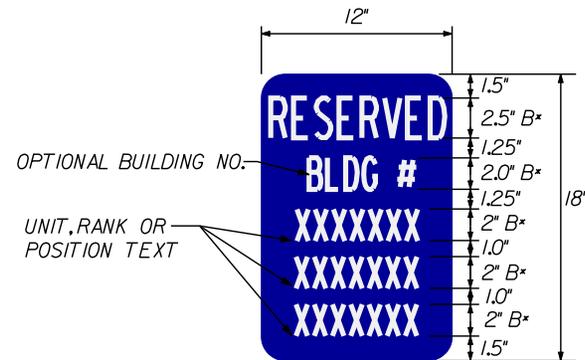
Example of existing parking lot signage

RECOMMENDATIONS

All signage that is required in parking lots should conform to the signage standards stated in Chapter 4 of this document and the MUTCD. Handicap signs should be appropriately located in a parking lot with respect to the buildings in which they serve. Signage should only be used where necessary and should be uncluttered and placed in highly visible locations to reduce driver distraction. Pole-mounted signage should be mounted on an approved break-away system to reduce the likelihood of injury or additional damage to errant vehicles.

Pole-mounted W11-2 MUTCD signs with solar powered flashing LED's are recommended at all highly trafficked crosswalks (see top left picture). LED's are viewable from a greater distance by both drivers and pedestrians. Drivers will have more advance notice of pedestrian crosswalks and pedestrians will be able to better identify safe crossing areas.

Pavement markings should conform to the MUTCD. They should be designed for easy identification and interpretation by drivers, and placed to facilitate proper traffic flow and differentiate travel lanes. In locations where signage cannot be used, appropriate pavement



* STANDARD ALPHABET SPACING SERIES B (MUTCD)

WIDTH AND HEIGHT	12" x 18"
CORNER RADIUS	1.5"
MOUNTING	GROUND
BACKGROUND	TYPE: REFLECTIVE COLOR: BLUE
TEXT	TYPE: REFLECTIVE COLOR: WHITE

Reserved parking space sign detail

Parking Lots



Example of proper reserved space marking



Example of a parking lot with poor pavement marking



Example of a parking lot with proper pavement marking

markings should be used instead. Where pavement markings are to be removed, proper equipment should be used to completely eradicate the pavement markings.

Pavement markings are typically constructed of one of two types of materials: waterbased paint or thermoplastic. Waterbased paint is a less expensive alternative to thermoplastic, but thermoplastic pavement markings have a longer service life. Due to the low traffic volumes relative to roadways, pavement markings in parking lots should be applied with waterbased paint.

Individual parking spaces should be reserved through the use of 6" to 12" pavement markings centered at the entrance to a parking space (see top left picture). The lettering should use a standardized stenciling set(s) and can be used to identify a reserved parking space for a specific title or group. Pavement markings are preferred over posted signage because they reduce visual clutter and are more cost beneficial. Signage should only be used in high visibility areas (see sign detail).

Exposure to traffic and environmental conditions causes signage and pavement markings to naturally crack and fade over time (see middle and bottom left pictures). It is important for these traffic control devices to be properly maintained. If not, there is a lessened respect for the messages that these devices convey and safety is compromised. An inventory should be kept of all signs and pavement markings with their date of installation and expected service life. Additionally, a routine inspection, usually annually, of all signage and pavement markings should be made and any repairs, cleaning or replacing should be made based on a prioritization of a particular devices' importance. Vegetation should be appropriately spaced from signage and maintained so as not to degrade its visibility.

Utilities

EXISTING CONDITIONS

Above ground power and telecommunications lines are located throughout Naval Weapons Station Yorktown. Additionally, steam lines can be found near buildings 31 and 93 (see picture below).

RECOMMENDATIONS

Above ground utilities create unsightly views and are susceptible to damage from inclement weather or accidents. Utilities that are placed below ground reduce skyline clutter and increase the ability to provide uninterrupted service. Relocation of any adjacent above ground utilities to below ground should be included as part of future site projects. Projects solely consisting of utility relocation should be prioritized and completed along primary roadways or in high visibility areas first. If relocation is not possible, or as an interim solution, consider screening above ground utilities with landscaping (see Chapter 1 for more information).



Above ground steam line near Building 31

Parking Lots



CHAPTER 6

Lighting