



DALLAS/FORT WORTH
INTERNATIONAL AIRPORT

Screening Criteria

Clarification to Part 9

Date of Draft – January 8, 2009



Planning Department

1. Purpose: Document the Airport’s interpretations of Section 15 Screening of Part Nine - Oil and Gas Exploration and Production.
2. Site definitions: The Airport classifies drilling or operation sites as follows:
 - **Greenfield Site, low visibility** - Site is located in a remote, non-developed area and is not readily visible from streets, highways, rail or nearby buildings.
 - **Greenfield Site, high visibility** - Site is located in a remote, non-developed area, but is visible to the public from streets, highway, rail or nearby buildings.
 - **Developed Site, low visibility** - Site is located within an area of current development or adjacent to streets, highways or rail, but is not in the direct view of such facilities.
 - **Developed Site, high visibility** - Site is located within an area of current development or adjacent to a street, highway or rail, and is in the direct view of such facilities and the public.
 - **High Profile Site, retail/resort/entertainment** - Site is located near or within a planned development or in the direct line of sight of such a building as determined by airport planning staff.
 - DFW Airport reserves the right to create additional site definitions or modify the above definitions as conditions warrant over the duration of the natural gas exploration lease.
3. Operator: as defined by DFW Airport’s Construction and Fire Prevention Standards Resolution & Amendments to the Codes, Part 9, Section 2.
4. Initial Installation: Operator is responsible for the initial installation of all elements of these standards during Operation Site development. If these standards are adopted after Operation Sites have been developed, Operator is responsible for upgrading Operation Site to conform with these standards.
5. Alternatives: In many instances alternates to these criteria are available due to issues such as availability or cost. Operators may therefore submit alternates to these criteria to DFW Planning for review and consideration. All submittals shall include a written justification as well as a sample material (if available), specification, and image.
6. Cost: Operator is responsible for all costs including, but not limited to: initial installation, upgrading, maintenance, replacement, and restoration.
7. Maintenance & Replacement: Operator is responsible for maintaining all Operation Sites to ensure compliance as set forth with the development criteria as stated herein. In the event elements of these criteria cannot be restored, maintenance may include replacing elements for such problems as, but not limited to, damage, destruction, or death as determined by DFW Airport. Plant materials must be maintained for the life of the lease and replacement is required within six months of damage, destruction, or death. All other elements must be repaired or replaced within 45 days of damage or destruction.
8. Upgrading a Site from Drilling to Production: The status of a site shall be changed from drilling to production when the earliest of the following occurs: 1) the last planned well is placed into production, or 2) drilling activities on the site have been dormant for 12 months, or 3) an operation site is in use for its intended purpose. The Operator must complete construction and installation of screening elements within 45 days and complete installation of all plant materials within six months.

9. Restoration: The Operator is responsible for restoring the elements of this criteria within 30 days of damage or modifications required during re-drilling or re-working.
10. Branding: At DFW Airport all Operator storage tanks will be painted white (Sherwin Williams City Loft SW1032). DFW reserves the right to brand the lead tank in public view from the roadway with the DFW logo; however, this tank may be branded with an approved standard size logo of the operating company in the center of the tank. Components of branding (logos, striping, and other elements) will be reviewed on a site-by-site basis. To review proposed branding, Operator must submit the following for each operation site:
 - a. Typical condition: Operator must submit a color photo of a typical tank for DFW records dimensioning the size of the blue bands and the size of the logo
 - b. With each pad construction permit, Operator must submit an operation site plan indicating which tank and direction for the logo on the site for DFW review and approval.
11. Upgrading Site to a New Category: At such time as surrounding development activity should change the definition of the site to a more stringent category, as determined by DFW Airport, the site shall be upgraded at the operator’s expense to the new criteria. The Operator must complete construction and installation of additionally required built elements within 90 days and complete installation of all plant materials within six months of the date of notice by DFW Airport.
12. Landscaping: Where vegetative screening is required, landscaping shall be in compliance with standard engineering and design practices. Operator must submit landscape plans, which include all features designated herein, specific to each operation site to DFW for review and approval.

Standard planting size:

	Common Name	Scientific Name	Standard Planting Size
tree	Cedar Elm	<i>Ulmus crassifolia</i>	4" caliper, ball size to meet American Nursery Association Standards
	Eastern Red Cedar	<i>Juniperus virginiana</i>	12-14' tall, b&b transplant, ball size to meet American Nursery Association Standards
small tree	Wax Myrtle	<i>Myrica cerifera</i>	30 gallon, Ht. 6-7'
	Yaupon Holly	<i>Ilex vomitoria</i>	30 gallon, Ht. 6-7'
shrub	Heavenly Bamboo	<i>Nandina domestica</i>	15 gallon
	'Bright 'N Tight' Cherry Laurel	<i>Prunus caroliniana</i> 'Bright 'N Tight'	30 gallon, Ht. 5-6'



Greenfield Site

“low visibility”

1. Definition: Site is located in a remote, non-developed area and is not readily visible from streets, highways, rail or nearby buildings.
2. Hardscape: surface treatment of pad site
 - drilling – crushed concrete aggregate
 - production
 - dust-free aggregate of a decomposed granite or colored gravel material at a depth to provide uniform reddish-brown color and coverage
 - where site disturbances exceed the fenced area of the pad, natural ground cover shall be restored with aggregate native grass seeding or buffalo grass sod
3. Fencing
 - drilling – 6’ tall (minimum) chain link fence including takeback
 - production – 6’ tall (minimum) chain link fence with top rail
4. Gate:
 - during drilling – 6’ tall chain link gate
 - during production – 6’ tall chain link gate
5. Access Road
 - material: crushed concrete
 - curb cuts
 - when an access road connects to an existing paved road, a curb cut is required.
 - curb cuts shall include paving to match adjacent road for a minimum of 65 feet.
6. Landscaping: not required
7. Lighting: Fixtures shall contain all light on-site utilizing high pressure sodium bulbs. Fixture must be directed downward, shielded to restrict horizontal cut-off angle. Maximum fixture height is restricted to 30’.
- drilling – Lumark Night Hawk III
- production – same as drilling
8. Paint: All tanks and production equipment will be painted soft white equal to Sherwin Williams City Loft SW1032 and may be branded at operator’s and/or DFW Airport’s discretion.
9. Setbacks: The setback shall be 10 feet except where it conflicts with existing code requirements. In the case of conflict with existing code, the setback shall be the maximum allowed by the code (typically 8 feet).

Example Pad Site: BW



Hardscape



Decomposed Granite



Drilling Hardscape: Crushed Concrete Aggregate



Production Hardscape: Decomposed Granite

Production Fencing



6' Tall Chain Link Fence with Top Rail

Gate



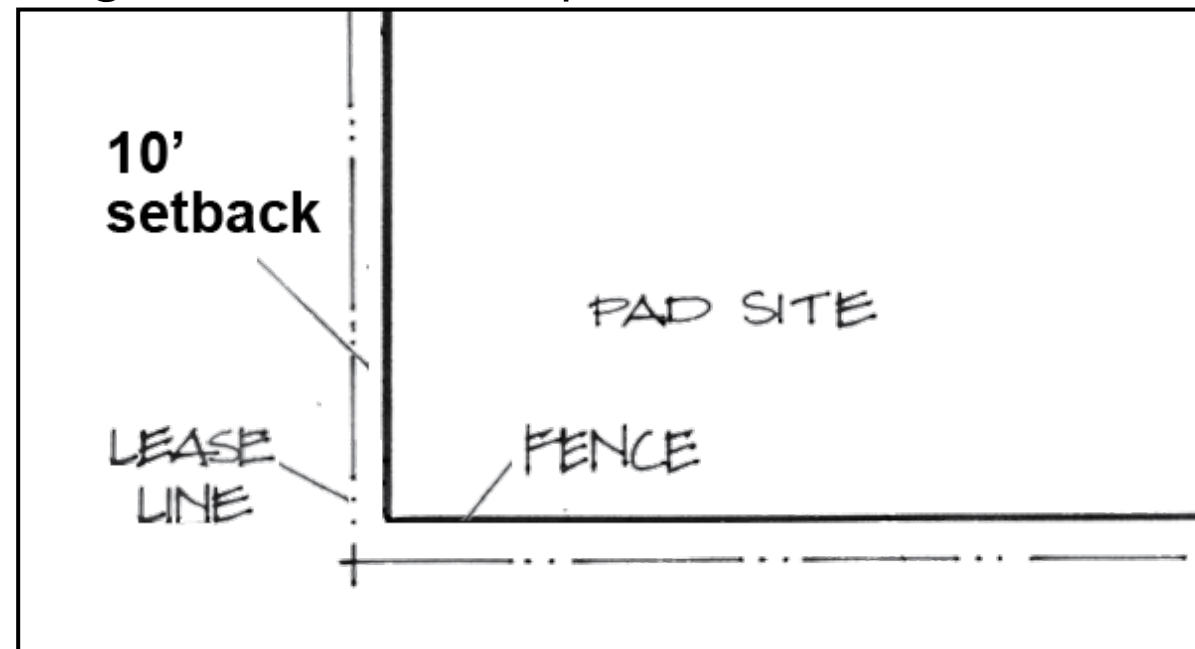
Standard Chain Link Gate

Paint



Soft White - Sherwin Williams SW1032

Diagram - Setback Requirements



Lighting



Lumark Nighthawk III

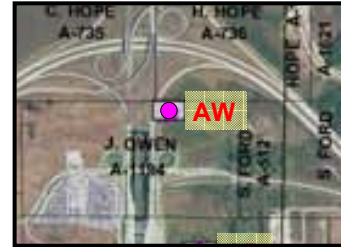
Greenfield Site

“high visibility”

1. Definition: Site is located in a remote, non-developed area, but is visible to the public from streets, highway, rail or nearby buildings.
2. Hardscape: surface treatment of pad site
 - drilling – crushed concrete aggregate
 - production
 - dust-free aggregate of a decomposed granite or colored gravel material at a depth to provide uniform reddish-brown color and coverage
 - where site disturbances exceed the fenced area of the pad, natural ground cover shall be restored with aggregate native grass seeding or buffalo grass sod.
3. Fencing
 - drilling – 6’ tall (minimum) chain link fence including takeback
 - production – 6’ tall (minimum) chain link fence with top rail
4. Gate:
 - during drilling – 6’ tall chain link gate
 - during production – 6’ tall chain link gate
5. Access Road
 - material: crushed concrete
 - curb cuts
 - when an access road connects to an existing paved road, a curb cut is required.
 - curb cuts shall include paving to match adjacent road for a minimum of 65 feet.
6. Landscaping: complete vegetative screening utilizing naturalistic appearance planting concept on side(s) visible from adjacent buildings or streets, highways or rail as determined by DFW Airport.
7. Lighting: Fixtures shall contain all light on-site utilizing high pressure sodium bulbs. Fixture must be directed downward, shielded to restrict horizontal cut-off angle. Maximum fixture height are restricted to 30’.
 - drilling – Lumark Night Hawk III
 - production – same as drilling
8. Paint: All tanks and production equipment will be painted soft white equal to Sherwin Williams - City Loft SW1032.
9. Setbacks: The setback shall be 10 feet except where it conflicts with existing code requirements. In the case of conflict with existing code, the setback shall be the maximum allowed by the code (typically 8 feet).

Screening Criteria Clarification to Part 9

Example Pad Site: AW



Hardscape



Decomposed Granite



Drilling Hardscape: Crushed Concrete Aggregate



Production Hardscape: Decomposed Granite

Production Fencing



6' High Chain Link Fence

Gate



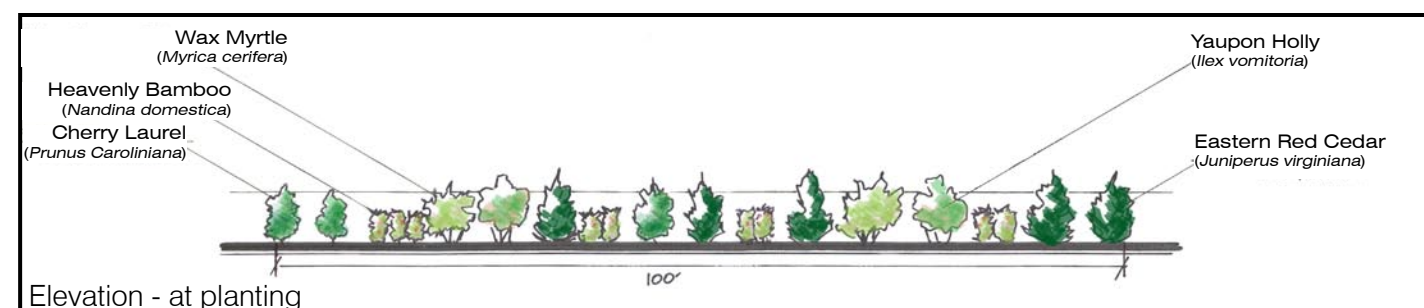
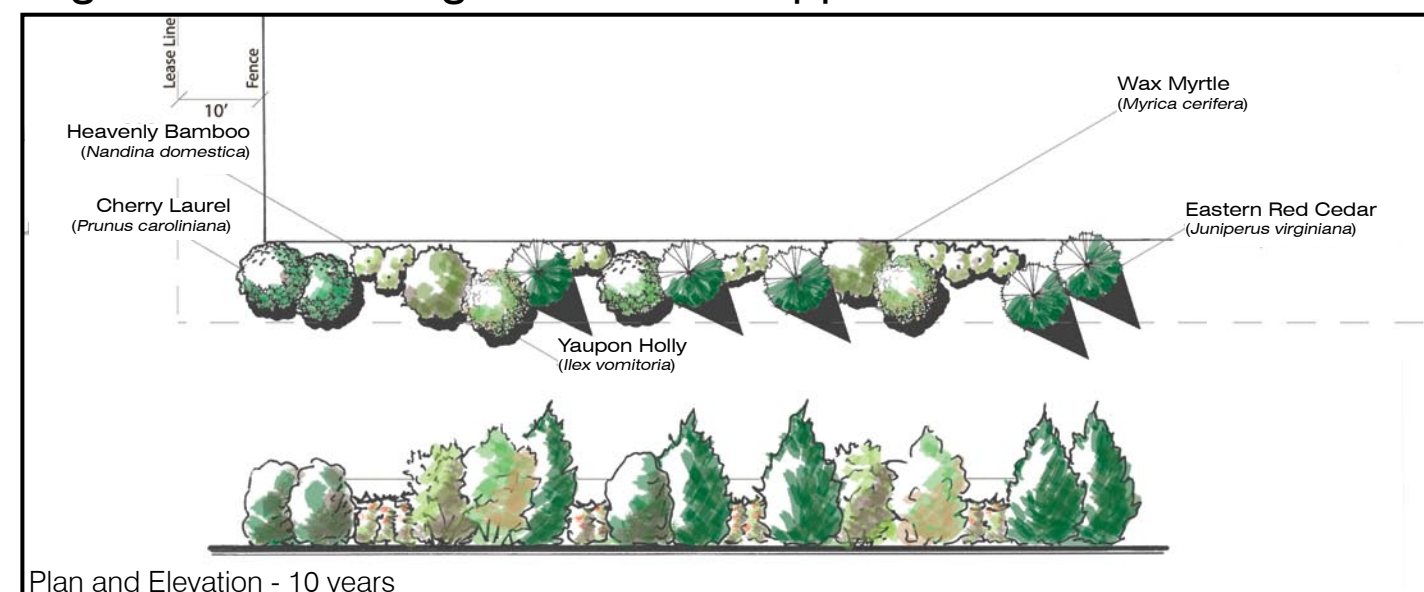
Standard Chain Link Gate

Paint



Soft White -
Sherwin Williams SW1032

Vegetative Screening - Naturalistic Appearance



Developed Site

“low visibility”

1. Definition: Site is located within an area of current development or adjacent to streets, highways or rail, but is not in the direct view of such facilities.
2. Hardscape: surface treatment of pad site
 - drilling – crushed concrete aggregate
 - production
 - dust-free aggregate of a decomposed granite or colored gravel material at a depth to provide uniform reddish-brown color and coverage
 - where site disturbances exceed the fenced area of the pad, natural ground cover shall be restored with aggregate native grass seeding or buffalo grass sod.
3. Fencing
 - drilling – 6’ tall (minimum) chain link fence with PVC vertical slats (dark brown or charcoal black in color on all sides)
 - production – 6’ tall (minimum) chain link fence with top rail and PVC vertical slats (dark brown or charcoal black in color on all sides)
4. Gate:
 - during drilling – 6’ chain link gate
 - during production
 - if not visible from developed area: 6’ tall chain link gate
 - if visible from developed area: 6’ tall architectural metal gate
5. Access Road
 - material: a concrete driveway is required for the first 65 feet from street after which crushed concrete is allowed.
 - curb cuts: when an access road connects to an existing paved road, a curb cut is required.
6. Landscaping: complete vegetative screening on all sides. Screening options include either an ordered or naturalistic appearance, or shall be consistent with the character of adjacent developments or roadways as determined by DFW Airport.
7. Lighting: Fixtures shall contain all light on-site utilizing high pressure sodium bulbs. Fixture must be directed downward, shielded to restrict horizontal cut-off angle. Maximum fixture height is restricted to 30’.
 - drilling – Lumark Night Hawk III
 - production – same as drilling
8. Paint: All tanks and production equipment will be painted soft white equal to Sherwin Williams City Loft SW1032.
9. Setbacks: The setback shall be 10 feet except where it conflicts with existing code requirements. In the case of conflict with existing code, the setback shall be the maximum allowed by the code (typically 8 feet).

Screening Criteria Clarification to Part 9

Example Pad Site: DA



Hardscape



Decomposed Granite



Drilling Hardscape: Crushed Concrete Aggregate



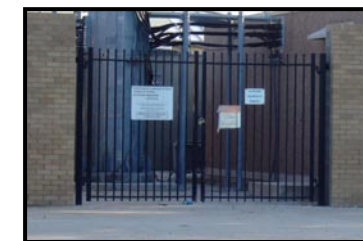
Production Hardscape: Decomposed Granite

Fencing



Chain Link with All-Weather Fabric

Gate



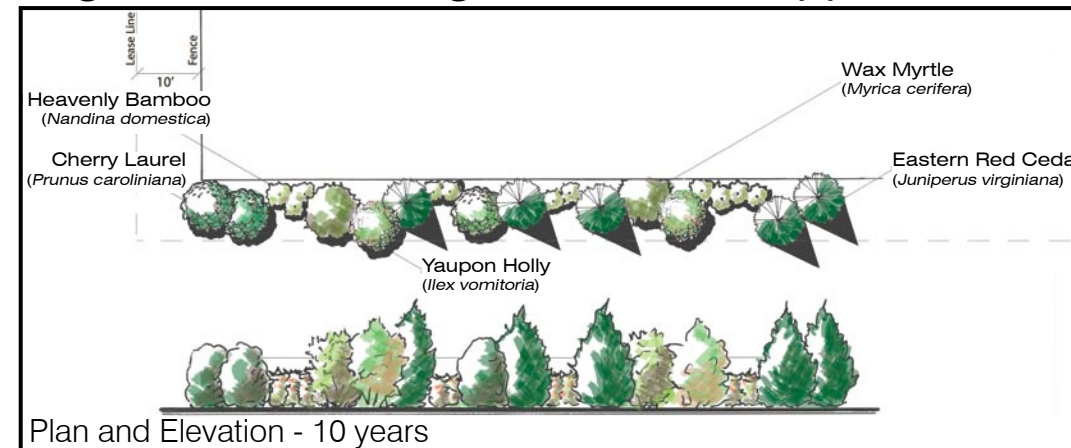
6' Tall Architectural Metal, Visible from Developed Area

Paint

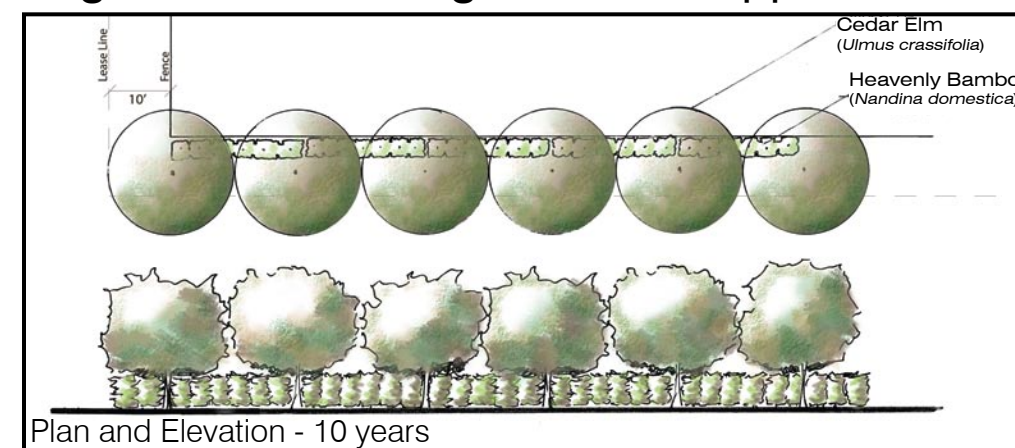


Soft White - Sherwin Williams SW1032

Vegetative Screening - Naturalistic Appearance



Vegetative Screening - Ordered Appearance



Developed Site

“high visibility”

1. Definition: Site is located within an area of current development or adjacent to a street, highway or rail, and is in the direct view of such facilities and the public.
2. Hardscape: surface treatment of pad site
 - drilling – crushed concrete aggregate.
 - production
 - dust-free aggregate of a decomposed granite or colored gravel material at a depth to provide uniform reddish-brown color and coverage.
 - where site disturbances exceed the fenced area of the pad, natural ground cover shall be restored with aggregate native grass seeding or buffalo grass sod.
3. Fencing
 - during drilling – 6’ tall (minimum) chain link fence with PVC vertical slats (dark brown or charcoal black in color on all sides)
 - during production – 8’ architectural metal fence having an expanse no greater than 50’ between masonry features no less than 10’ long. Corners of production screening shall be masonry with a 10’ length on both sides of corner. Gates shall be flanked by masonry features with a minimum length of 10’. Masonry features shall be consistent with the adjacent development and shall be either brick, stone, patterned concrete or textured concrete. CMU masonry features are prohibited. Masonry features shall have both vertical and horizontal articulation. Operator must submit a dimensioned plan for DFW Airport approval.
4. Gate:
 - during drilling – 6’ chain link gate
 - during production – 8’ architectural metal gate. Gates shall be flanked by masonry features with a minimum length of 10’.
5. Access Road
 - material: reinforced concrete paving
 - curb cuts: when an access road connects to an existing paved road, a curb cut is required.
6. Landscaping: complete vegetative screening on all sides. Screening options include either an ordered or naturalistic appearance, or shall be consistent with the character of adjacent developments or roadways as determined by DFW Airport.
7. Lighting: Fixtures shall contain all light on-site utilizing high pressure sodium bulbs. Fixture must be directed downward, shielded to restrict horizontal cut-off angle. Maximum fixture height restricted to 30’.
 - drilling – Lumark Night Hawk III
 - production – “Concord” by Sterner, (or equal design by Spaulding or McGraw Edison) factory painted gray finish to match pole
8. Paint: All tanks and production equipment will be painted soft white equal to Sherwin Williams - City Loft SW1032.
9. Setbacks: The setback shall be 10 feet except where it conflicts with existing code requirements. In the case of conflict with existing code, the setback shall be the maximum allowed by the code (typically 8 feet).

Screening Criteria

Clarification to Part 9

Example Pad Site: AN



Hardscape



Decomposed Granite



Drilling Hardscape: Crushed Concrete



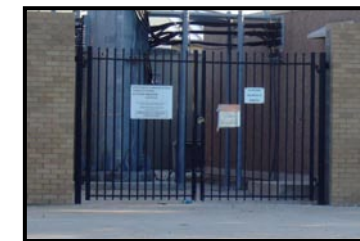
Production Hardscape: Decomposed Granite

Production Fencing



Metal Fence with Masonry Feature

Gate



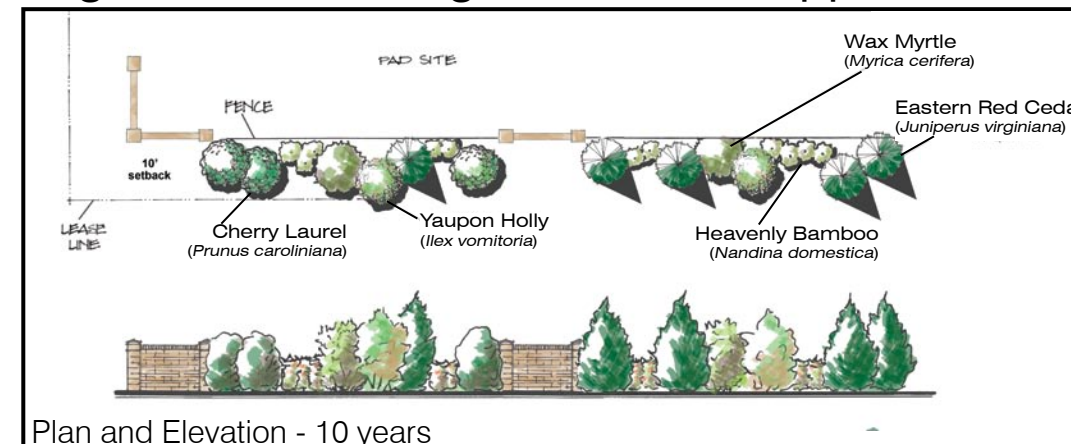
8' Tall Architectural Metal, Visible from Developed Area

Paint

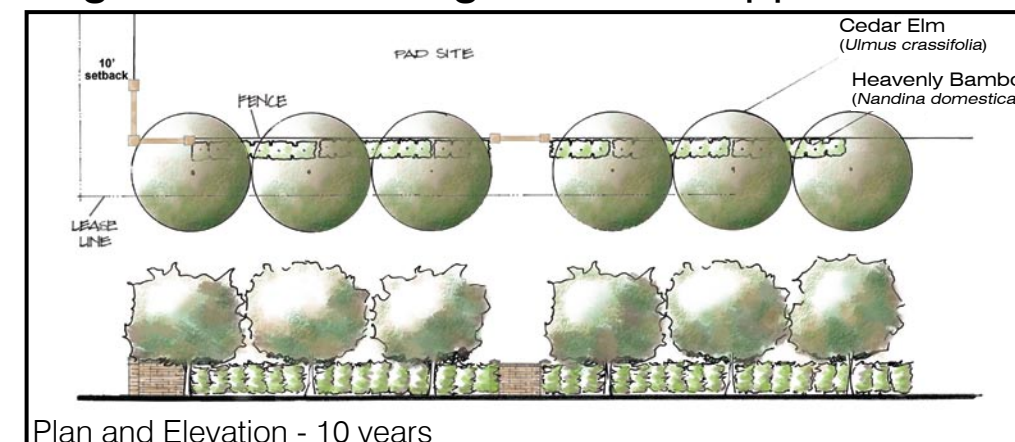


Soft White - Sherwin Williams SW1032

Vegetative Screening - Naturalistic Appearance



Vegetative Screening - Ordered Appearance



Access Road



Reinforced Concrete Paving

Lighting



“Concord” by Sterner

High Profile Site

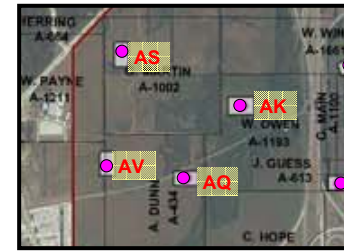
“retail/resort/entertainment”

1. Definition: Site is located near or within a planned development or in the direct line of sight of such a building as determined by airport planning staff.
2. Hardscape: surface treatment of pad site
 - drilling – crushed concrete aggregate
 - production
 - dust-free aggregate of a decomposed granite or colored gravel material at a depth to provide uniform reddish-brown color and coverage.
 - where site disturbances exceed the fenced area of the pad, natural ground cover shall be restored with aggregate native grass seeding or buffalo grass sod.
3. Fencing
 - during drilling – 6’ high chain link fence with all-weather fabric or PVC vertical slats on all sides
 - during production – 8’ architectural metal fence having an expanse no greater than 50’ between masonry features no less than 10’ long. Corners of production screening shall be masonry with a 10’ expanse on both sides of corner. Gates shall be flanked by masonry features with a minimum length of 10’. Masonry features shall be consistent with the adjacent development and shall be either brick, stone, patterned concrete or textured concrete. CMU masonry features are prohibited. Masonry features shall have both vertical and horizontal articulation. Operator must submit a dimensioned plan for DFW Airport approval.
4. Gate:
 - during drilling – 6’ chain link gate
 - during production – 8’ architectural metal gate. Gates shall be flanked by masonry features with a minimum length of 10’ that are consistent with masonry features used in fencing.
5. Access Road
 - material: reinforced concrete paving, which shall contain an eight-foot wide band of stamped, colored concrete complying with the standards established by the Airport, shall be provided across all driveways. Band aligns with lease line and projects into street right-of-way.
 - color: medium grey integral color concrete
 - texture: slate
 - pattern two-foot by two-foot grid
 - curb cuts: when an access road connects to an existing paved road, a curb cut is required.
6. Landscaping
 - vegetative screening option required on all sides utilizing either an ordered or naturalistic appearance, or shall be consistent with the character of adjacent developments or roadways as determined by DFW Airport. Each landscaped area shall incorporating feature plants that are consistent with adjacent developments.
 - feature plants spaced no more than 20’ and should be consistent with landscaping elements of adjacent developments as determined by DFW Airport Planning.
7. Lighting: Fixtures shall contain all light on-site utilizing high pressure sodium bulbs. Fixture must be directed downward, shielded to restrict horizontal cut-off angle. Maximum fixture height restricted to 30’.
- drilling – Lumark Night Hawk III
- production – fixture to match standard established for neighborhood or if no standard is established, “Concord” by Sterner, (or equal design by Spaulding or McGraw Edison) factory painted gray finish to match pole
8. Paint: All tanks and production equipment will be painted soft white equal to Sherwin Williams - City Loft SW1032.
9. The setback shall be 10 feet except where it conflicts with existing code requirements. In the case of conflict with existing code, the setback shall be the maximum allowed by the code (typically 8 feet).

Screening Criteria Clarification to Part 9

Example Pad

Sites: AS, AK, AV, AQ



Hardscape



Decomposed Granite



Drilling Hardscape: Crushed Concrete Aggregate



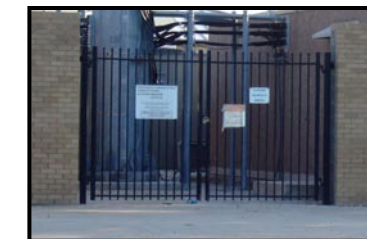
Production Hardscape: Decomposed Granite

Production Fencing



Architectural metal wall with masonry features

Gate



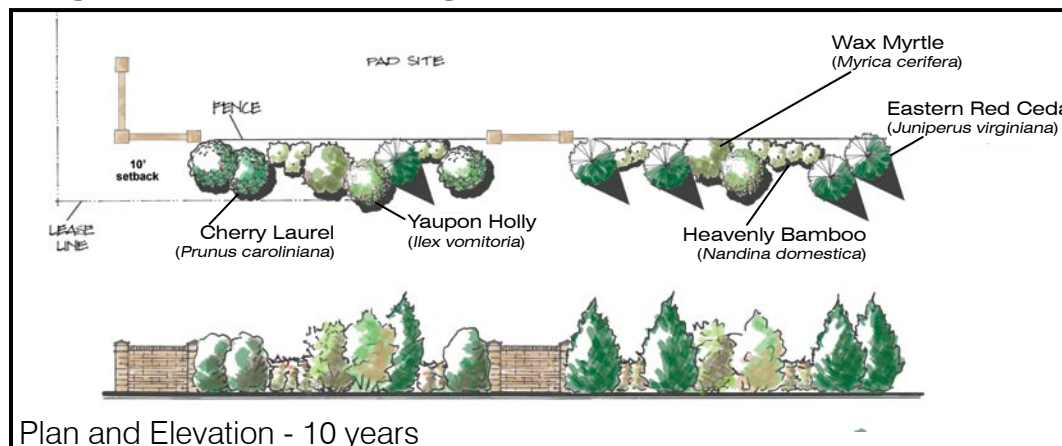
8' Tall Architectural Metal, Visible from Developed Area

Paint



Soft White - Sherwin Williams SW1032

Vegetative Screening - Naturalistic Appearance



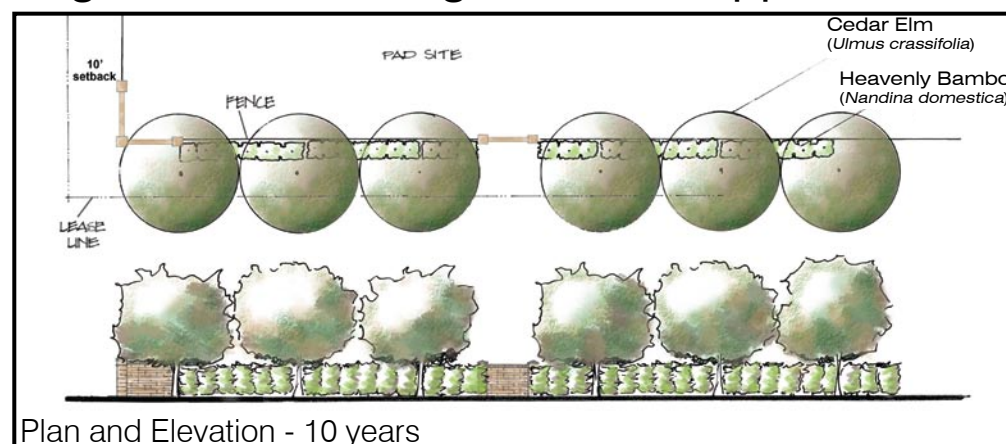
Plan and Elevation - 10 years

Access Road



Reinforced Concrete Paving with Stamped Concrete Access Band

Vegetative Screening - Ordered Appearance



Plan and Elevation - 10 years