



Burke Lake Golf Course Clubhouse Replacement and Driving Range Expansion 2015



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Background

Located in the Springfield District, Burke Lake Golf Course is part of the 888 acre Burke Lake Park. The existing golf complex opened in 1970 and includes:

- 1,800 sf club house,
- 600 sf storage building,
- 480 sf golf pro building,
- 18-hole par 3 golf course,
- Lit driving range with 40 at-grade unsheltered hitting stations,
- Practice bunker,
- 8,000 sf practice putting green,
- 114 lit parking spaces.



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2008 – 2012 Capital Improvement Program

- **Replacement of the Existing Clubhouse**
 - Existing building is 45 years old.
 - Does not meet ADA requirements.
 - Insufficient operational space.
- **Driving Range and Parking Lot Expansion**
 - Allow for additional driving range stations including all-weather capabilities for year round use
- **Total Park Bond Funding - \$5,360,000**



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Goals of the Project

Clubhouse

The existing clubhouse is deficient in the following :

- The clubhouse is not able to be modified to meet the current accessibility standards.
- The building is beyond its expected lifecycle and is currently in substandard condition.
- The building is inadequately sized for its current function.

A new replacement building will be provided and will be sized to meet the needs of the golf course and driving range facility. New building placement will allow the course and existing clubhouse to remain open during construction.

New Driving Range

The driving range will expand the number of hitting stations to increase the revenues of the driving range. The new lighted driving range will contain the following amenities:

- 64 total hitting stations.
- Up to 48 covered hitting stations with 24 heated hitting stations that can be used year-round.
- 16 at-grade hitting stations.
- 6 fully accessible hitting stations.
- 2 covered group areas at the driving range centered around 4 hitting stations each.

Revenues are expected to increase by 40%.

The increased golf revenue will stay within the Park Authority Revenue Fund. The Revenue Fund is an enterprise fund comprised of our RECenter, Golf Course Operations, Lake Front Operations and a few smaller contributing business lines. This Revenue Fund requires all operating costs to be covered by fees generated from these lines of business.



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Current Site Conditions



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Arborists Inspection of Existing Willow Oaks at Driving Range

There are four willow oaks approximately 45 years old integrated into the current driving range location.

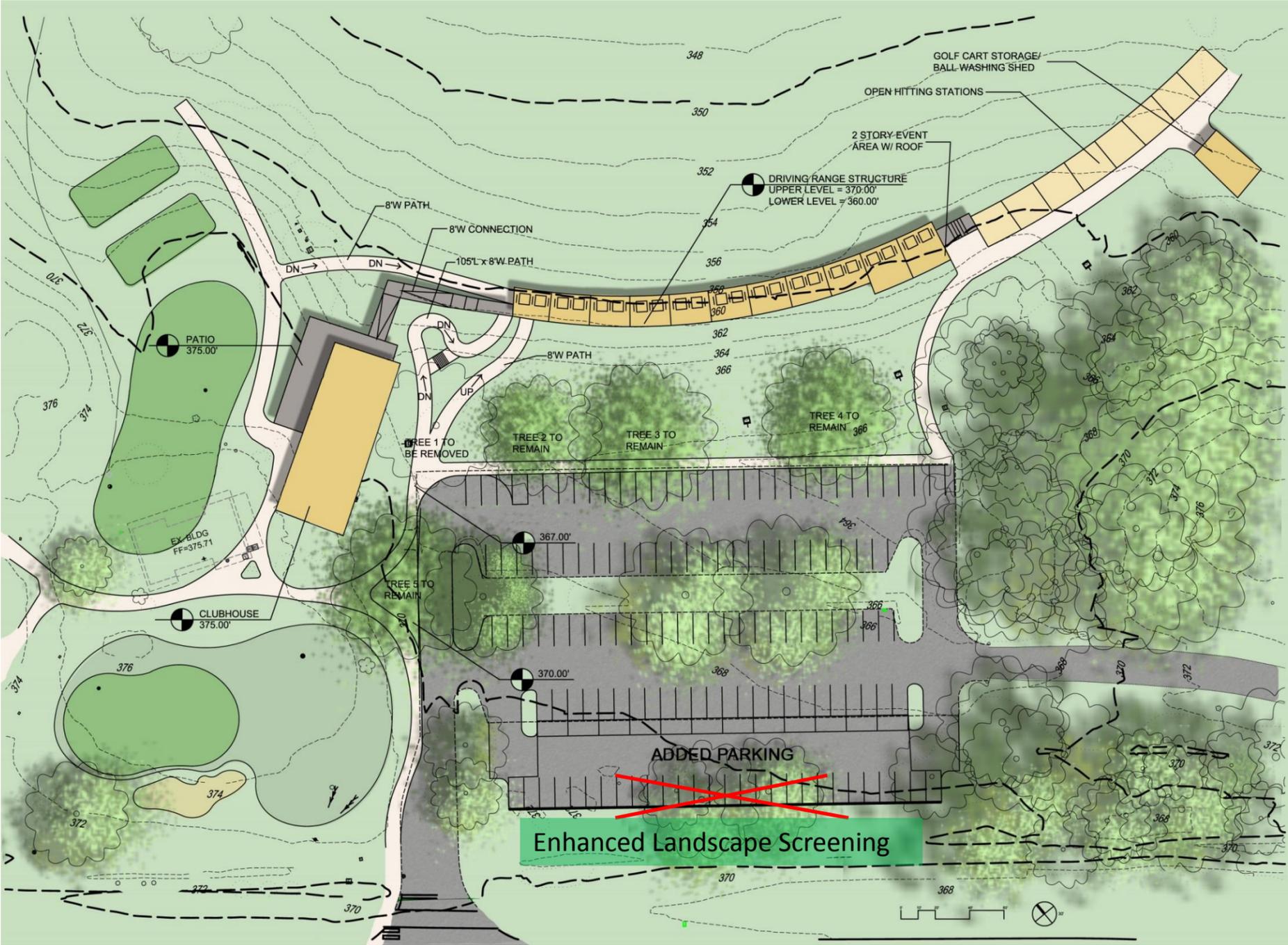
- **All four trees are in good condition.**
- **All trees currently are experiencing stress due to soil compaction as a result of the paths around the base of the trees within the critical root zone area.**
- **Moving the driving range forward reduces the impact to the critical root zone area for the trees.**
- **Due to the grading and circulation, the tree nearest the clubhouse will need to be removed.**



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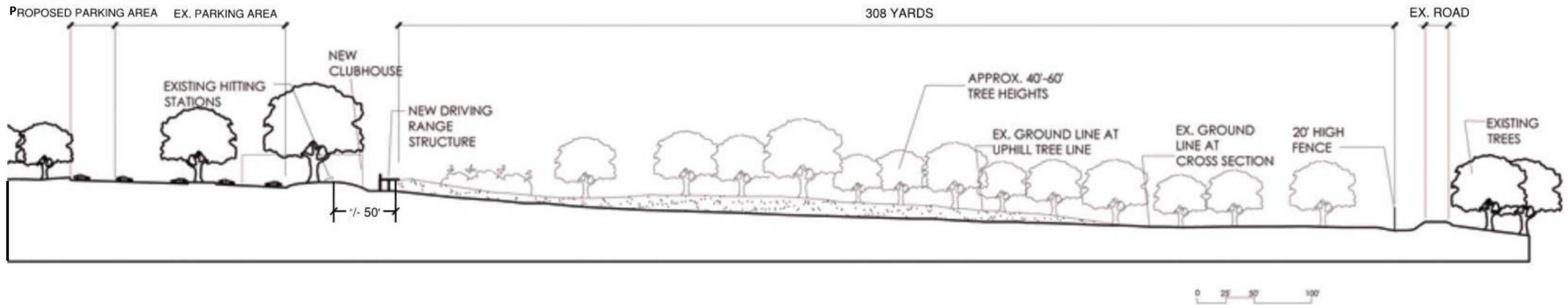
Conceptual Layout for New Clubhouse & Driving Range



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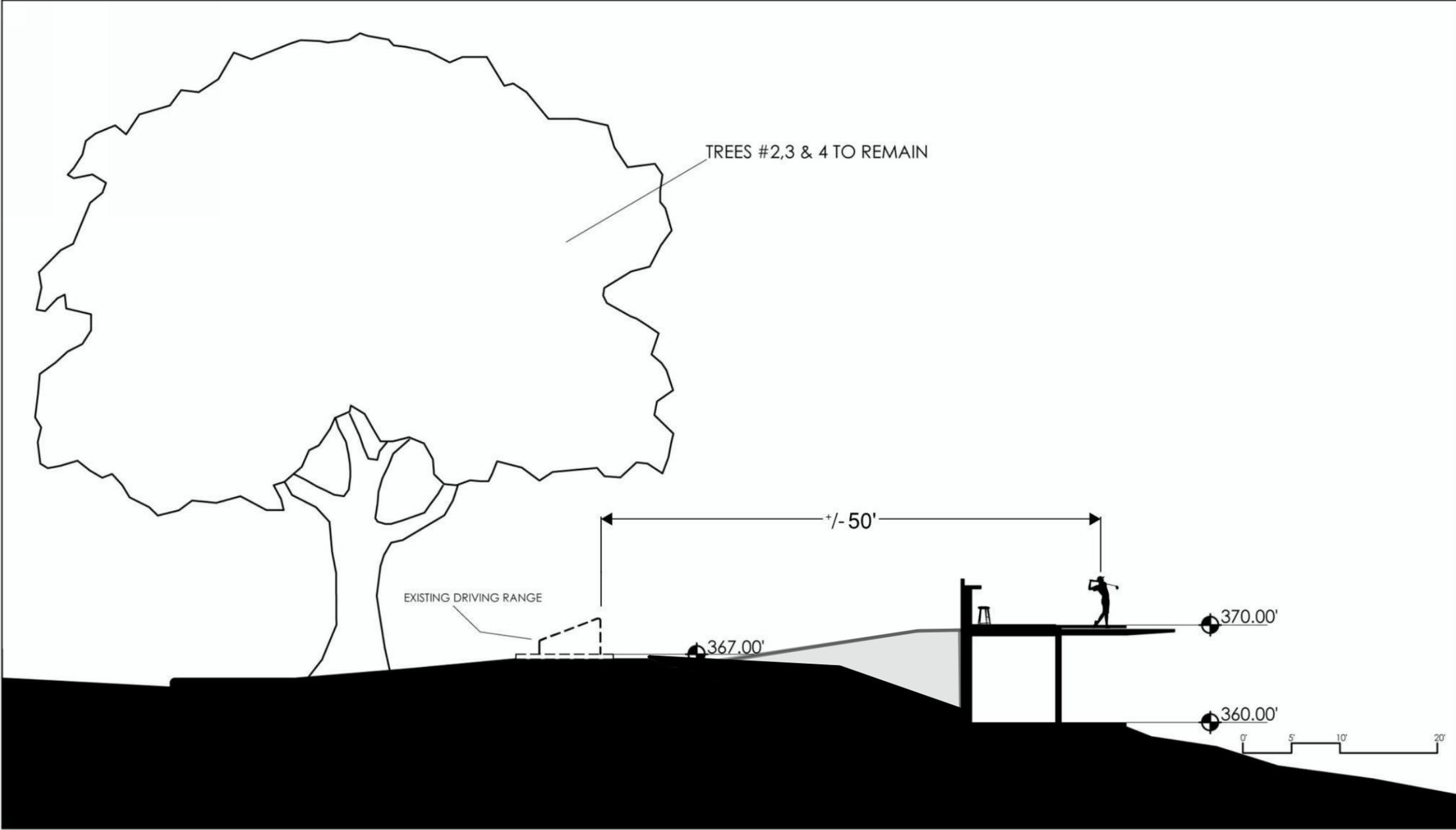
New Driving Range Site Section



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New Driving Range Section



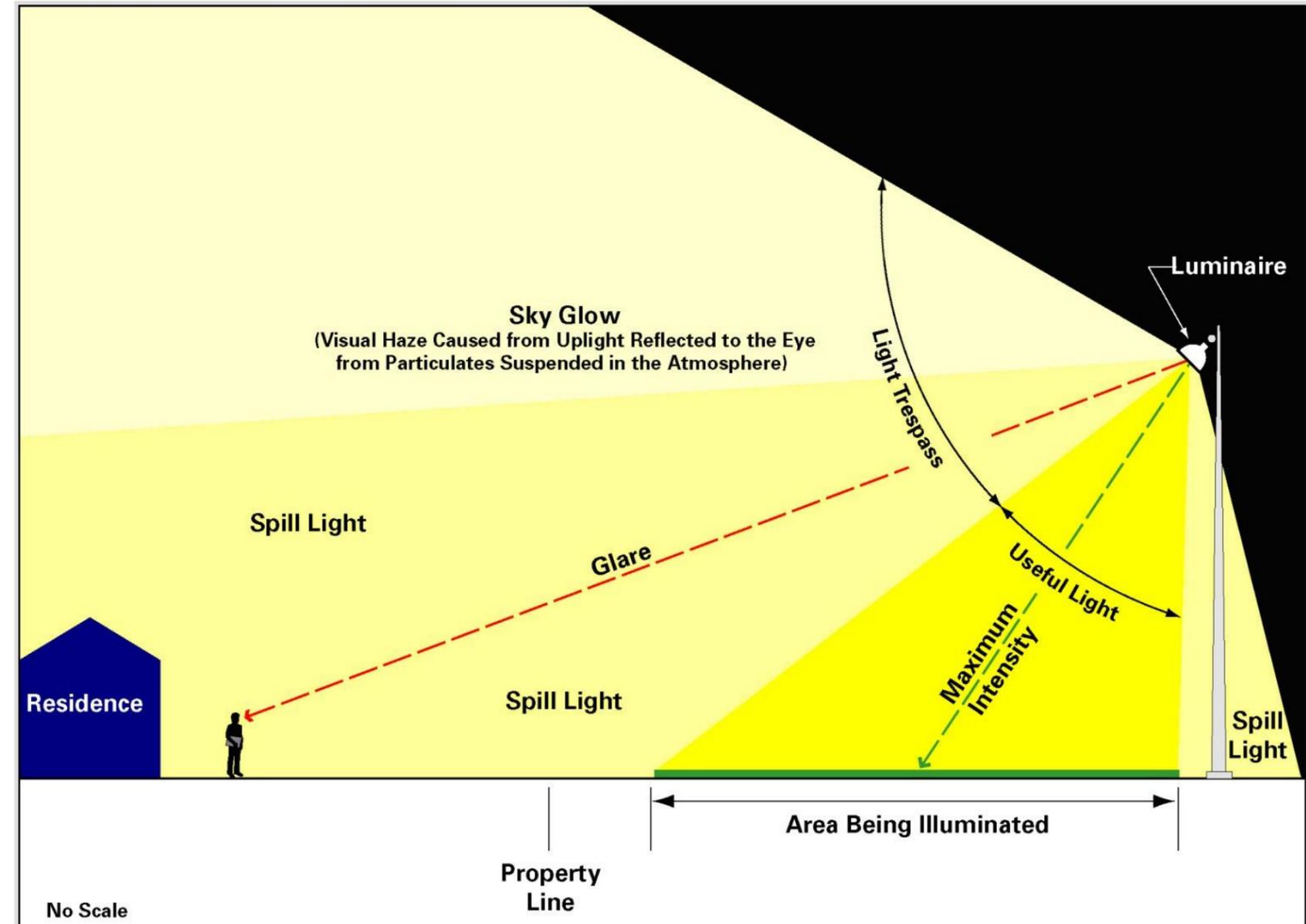
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Driving Range Lighting

Obtrusive Light

- Useful Light
- 3 Interrelated Elements
 - Spill Light
 - Glare
 - Sky Glow



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Driving Range Lighting



- **Fairfax County Park Authority developed an industry leading standard for field lighting in a municipal setting that limits off field trespass and uplight.**
- **Lights are fully shielded and Zoning ordinance compliant.**
- **Satellite controls for lights. No override capacity.**
- **Pole heights are specified to allow for maximum directional control of light fixtures.**

***Levels of maximum illumination shall meet zoning ordinance.**

- **Tee Boxes 20 footcandles**
- **Fairways 3 footcandles.**



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Golf Course Operations

Hours of Operation

	<u>Existing</u>	<u>Proposed</u>
Golf Course	Dawn to Dusk	Dawn to Dusk
Driving Range	Dawn to 10 pm	Dawn to 11 pm (if there is use demand)*
Kitchen Service	Dawn to Dusk	Dawn to 10 pm

*All county athletic field lighting to be turned off at 11 pm.

Food and Beverage:

- **Food service will be provided similar to FCPA's other golf facilities. Kitchen will serve standard limited menu similar to Twin Lakes. In addition, snacks and drinks will be sold outside of kitchen hours.**
- **The clubhouse currently sells aluminum packaged beer at the clubhouse and allowed to be consumed on the course. Draft beer will be added for the clubhouse only. Packaged beer will allowed to be consumed on the course and the driving range as our current Virginia ABC License permits.**
- **There will be no bar area in the clubhouse. There will be an ordering counter and tables provided for approximately 40 persons indoors. There will be outdoor tables provided for approximately 40 persons should there be the demand.**



Burke Lake Park Sanitary Sewer History

Condition of Septic Systems and Associated Drainfields

**LOCATION	TYPE OF SEWER	AGE	*EXPECTED LIFE CYCLE
Golf Course Clubhouse/Driving Range	Septic	47	25-30 years
Ice Cream Parlor	Septic	33	25-30 years
Administrative Building	Septic	47	25-30 years
Marina Buildings	Septic	50	25-30 years
Picnic Shelter Restrooms	Septic	47	25-30 years
Maintenance Building	Septic	28	25-30 years
Bathhouse Buildings	Septic	28	25-30 years

*** Per Fairfax County Health Department**

**** Currently pumping out all septic tanks annually as precautionary measure**



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Sanitary Sewer Options

As the aged septic systems throughout the Park become more problematic or fail, the same challenges will have to be faced in regards to identifying the code required undisturbed land mass and suitable soils to replace or upgrade the systems. Given the current existing conditions, the following options were considered for the Park:

Sanitary Sewer Options	Considerations
Traditional Septic Drainfield System	Updated Health Department requirements include primary drainfield as well as a reserve field.
Pump and Haul System	Currently not eligible per Department of Public Works and Environmental Services (DPWES). \$220,000 estimated yearly cost if eligible per DPWES.
Connect to Sanitary Sewer	Sewer connection was provided in 1985 when adjoining subdivision was developed by easement negotiated by Park Authority for connection of Burke Lake Park to Sanitary Sewer.



Limitations for New Septic/Drainfields

Location	Limitation
Golf Course Clubhouse/Driving Range	Conflicts with existing irrigation piping system for the course as well as the existing electrical easement.
Ice Cream Parlor	<i>Limited available landmass for a new drainfield system. Heavily wooded area.</i>
Administrative Building	<i>Limited available landmass for a new drainfield system.</i>
Marina Buildings	<i>Limited available landmass for a new drainfield system. Heavily wooded area.</i>
Picnic Shelter Restrooms	Heavily Wooded area.
Maintenance Building	<i>Limited available landmass for a new drainfield system. Heavily wooded area.</i>
Campsite Buildings	<i>Limited available landmass for a new drainfield system. Heavily wooded area.</i>

*** Approximately 1/4 acre-1 acre of septic fields at each location would have to be added to meet the current Fairfax County Health Department requirement. The cost associated with meeting this requirement would range from \$75,000-\$200,000 per field.**



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Connect to Sanitary Sewer Option

Location	Type of Connection
Golf Course Clubhouse/Driving Range	Gravity
Ice Cream Parlor	Gravity
Administrative Building	Gravity
Marina Buildings	Force Main
Picnic Shelter Restrooms	Gravity



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Sanitary Sewer Connection Plan

- Based on the 2012 feasibility study results and consideration of the other viable wastewater disposal options, it was determined that connecting to public sanitary sewer was the most practical and cost effective long range solution for sanitary waste management for the new Clubhouse/Driving Range as well as for future connections to Burke Lake Park's facilities.
- Design commenced on a piped sanitary sewer system in mid-year 2013 and is currently in the permit process.
- The approximate length of the proposed sewer line is 7,000 linear feet and the construction is valued at 1.6M. This project is separately funded from the golf course improvements.
- During construction in order to minimize the limits of clearing, trench box installation will be utilized. Additionally, extensive restoration Plan has been developed to further mitigate the impacts.



Burke Lake Park - Septic Field Study

0 250 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 Feet

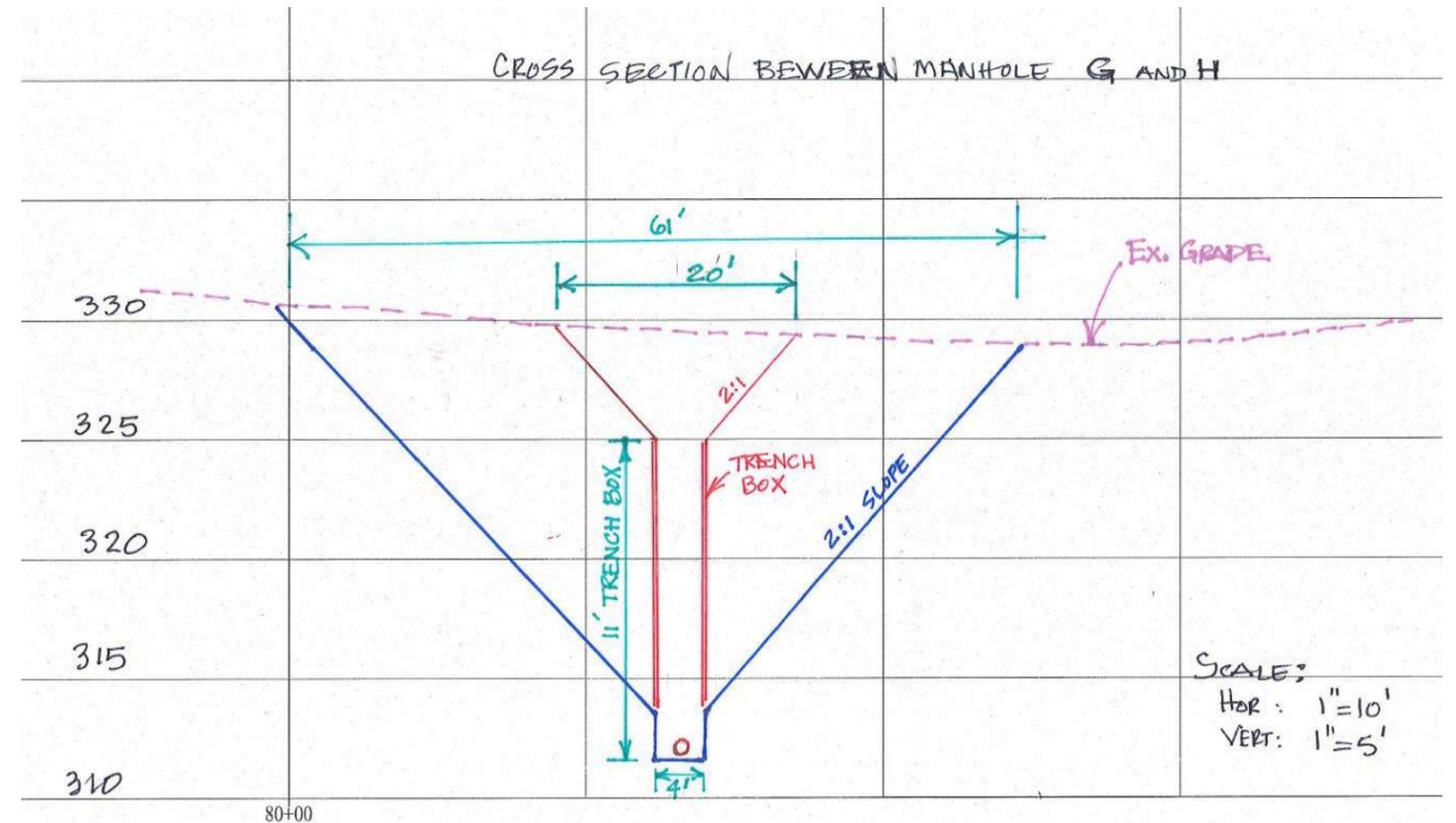
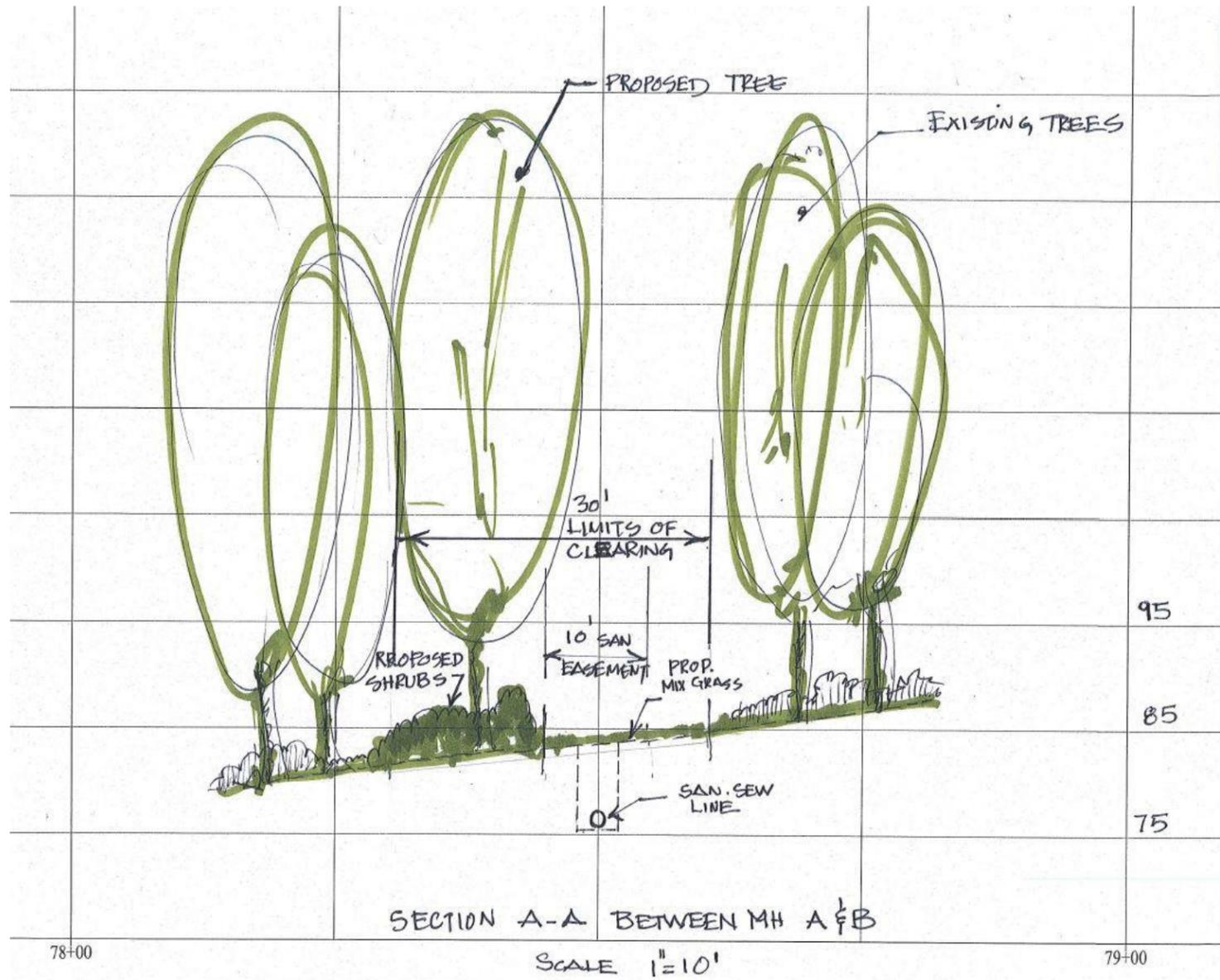


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Sanitary Sewer Line Restoration Plan

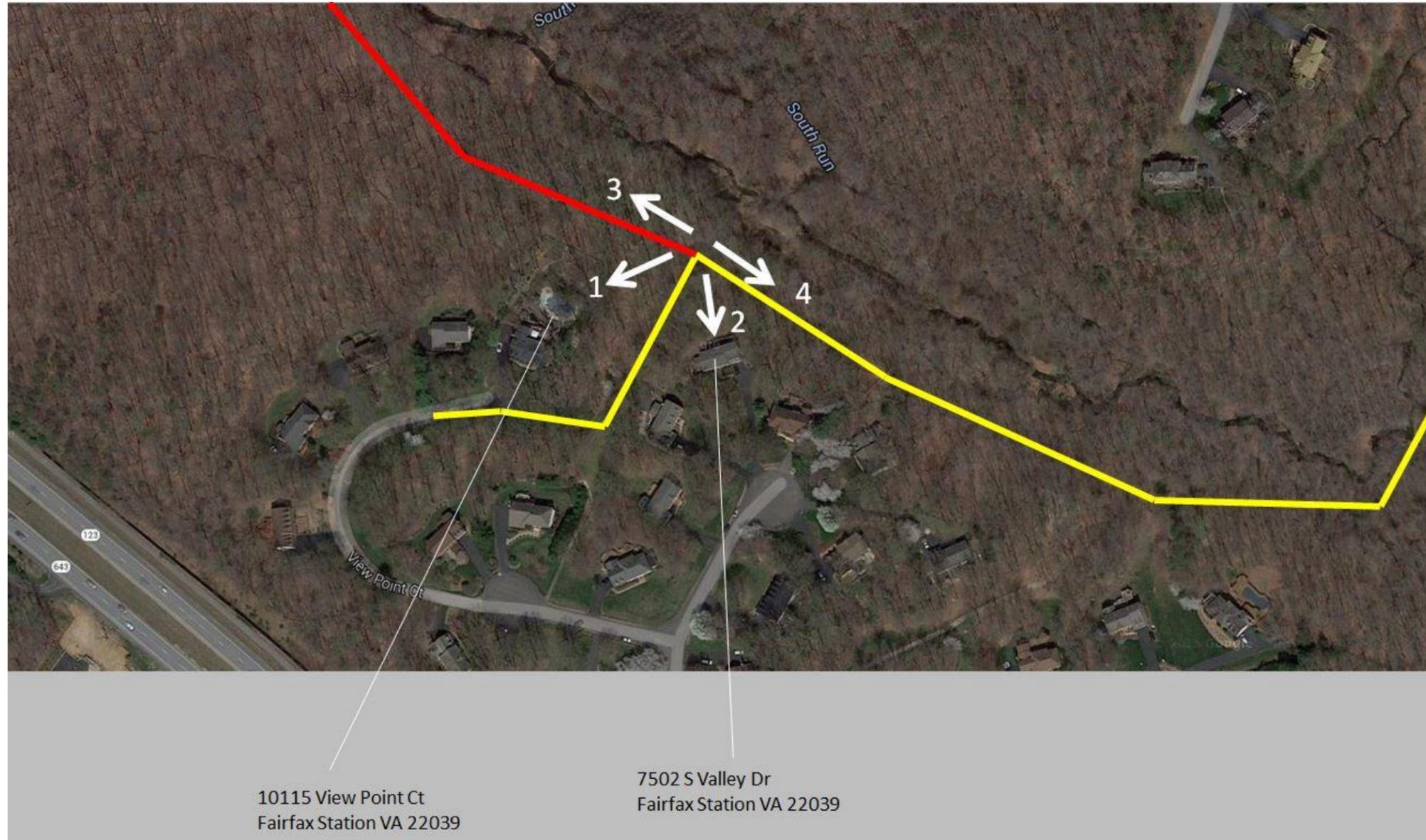
Typical Section of Restoration Plan



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Connection Location to Existing Sewer



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Connection Location to Existing Sewer



1.
View from connecting manhole
looking to 10115 View Point Ct
Fairfax Station VA 22039



2.
View from connecting manhole
looking to 7502 S Valley Dr
Fairfax Station VA 22039



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Connection Location to Existing Sewer



3.
View from connecting manhole looking
towards proposed sewer line



4.
View from connecting manhole looking
towards existing sewer line



Project Milestone Schedule

Sanitary Sewer Line

- Design and Permitting Completion **Fall 2015**
- Construction Bid **To Be Determined**
- Construction **To Be Determined**

Clubhouse and Driving Range Improvements

- Design and Permitting Completion **Fall 2016**
- Construction Bid **To Be Determined**
- Construction **To Be Determined**

Construction Scheduling Constraints

- High School Cross Country season **August - November**
- Northern Long-eared Bat roosting **June - July**
- Revenue Constraints **To Be Determined**



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Questions/Comments?

Follow the project

<http://www.fairfaxcounty.gov/parks/golf/blgc/>



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