



CITY OF SUGAR LAND

Rose Rosette Disease

City of Sugar Land
Public Works Department

Action Plan

Prepared by:
City of Sugar Land
Public Works Department
Right of Way Services Division
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I. INTRODUCTION

Rose Rosette Disease (RRD) has been identified on multiflora roses since the 1940s. Distinctive characteristics of RRD include; “witches broom,” elongated stems, excessive thorn production, discoloration of the flowers & leaves, as well as dieback of the branches. While RRD has been around, its resurgence in the last ten years within the landscape and nursery industries has reached epidemic proportions in North Texas. This has prompted extensive research efforts with the USDA, multiple state agencies, universities, and extension services.

Through this research, it has been determined that RRD is caused by a virus, which currently has no known cure, and is ultimately fatal. The eriophyid mite, *Phyllocoptes fructiphilus*, has been determined as the primary avenue for the spread of the virus. These microscopic mites do not fly, but are transported by the wind, however, they can also crawl from plant to plant. Secondary infections have been found by the way of root grafting and by the contact of open wounds of infected plants with healthy plants.

At the current time, there has not been a quarantine enforcement at the State or Federal level, but it is highly recommended to isolate, remove, and destroy any infected rose to minimize the spread of the mites and disease.

II. SUGAR LAND’S PROPOSED RESPONSE

Objective: To be horticulturally responsible by implementing measures to minimize the spread of RRD both within the community and surrounding areas.

- A. **Inventory:** ROW Services staff has made site visits and reviewed past design plans for the City maintained right of ways, and estimate that there are over 5,200 roses under the City’s maintenance. Of these roses, the two primary varieties are “Knockout” and “Nearly Wild.”
- B. **Initial Measures:** Of the estimated 5,200 roses, the City will initially remove all roses (<600) in the esplanades on SH6 from Kensington Dr to Town Center Blvd. This location is where the first detection was made and verified of RRD, and its presence is the most prevalent.
- C. **Future Operating Procedures:** Moving forward, staff will focus their attention and efforts on the “Knockout” variety of roses, as they are the most susceptible. Once staff identifies newly infected roses, that plant, as well as

all roses immediately planted surrounding the infected plant will be removed. The intent is to mitigate transference of the disease by root graft or allowing the mite to crawl from plant to plant. Once the removal of a grouping of roses reaches 30% or more of the total roses in a mass planting, the entire bed will be removed.

It should be noted that this disease only infects roses, so non-rose varieties will not be removed.

- D. Replanting: As the annual budget allows, once infected roses are removed, only non-rose varieties of plant material will be replaced. As there is no known cure for the disease or a fiscally responsible treatment plan for prevention, this will be the City's trend moving forward.

III. FUTURE STEPS

The City of Sugar Land will be taking steps to proactively evaluate their current plant palette and landscape design concepts to minimize monoculture plantings. By increasing the variety of plant material in the landscape, it will minimize the devastating impacts of wiping out a single plant species should something like this happen again in the future.

ADDITIONAL INFO

<https://roserosette.org/>

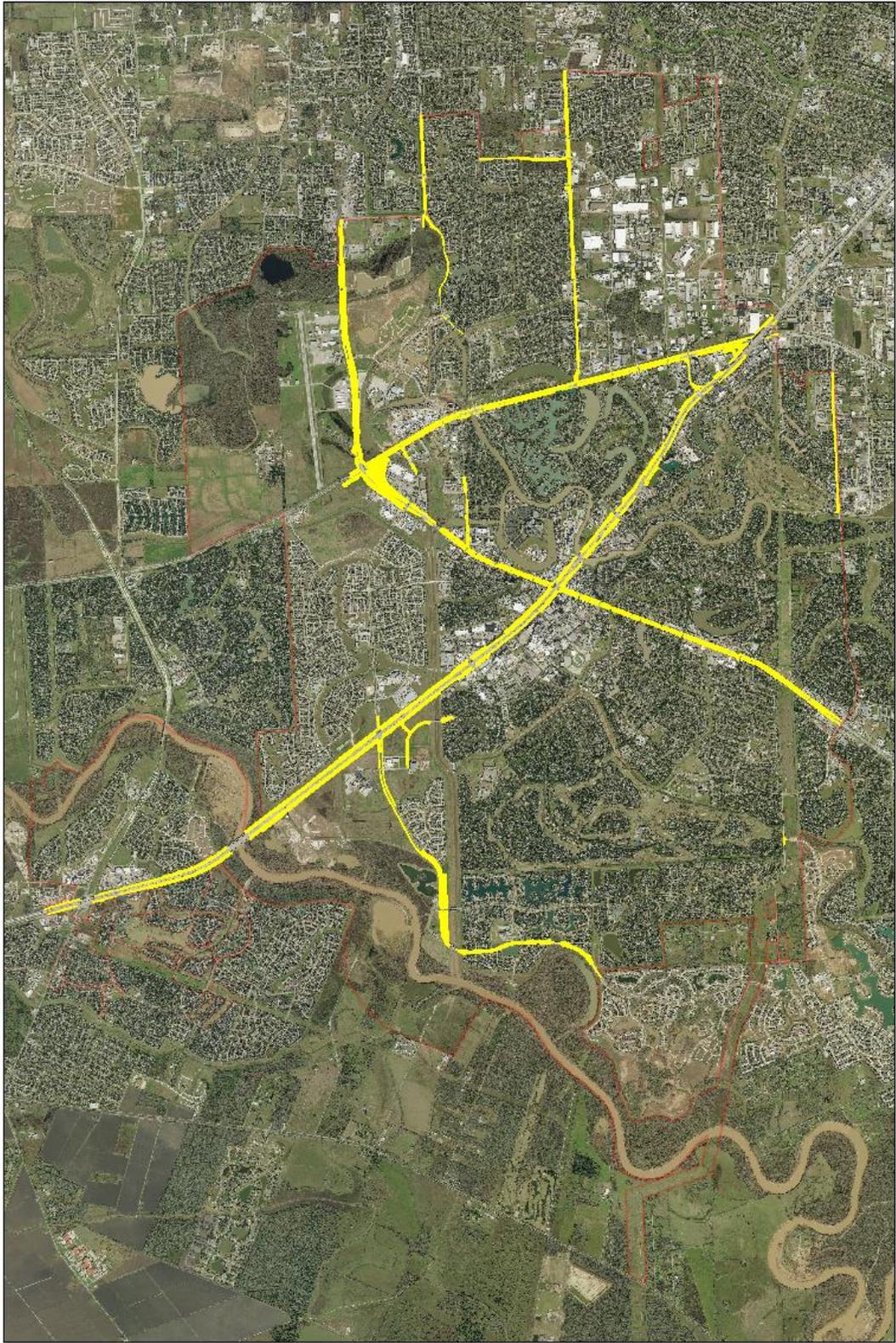
<https://plantclinic.tamu.edu/2011/07/13/rose-rosette/>

http://www.newenglandgrows.org/pdfs/ho_WindhamRoseRosette.pdf

ATTACHMENTS

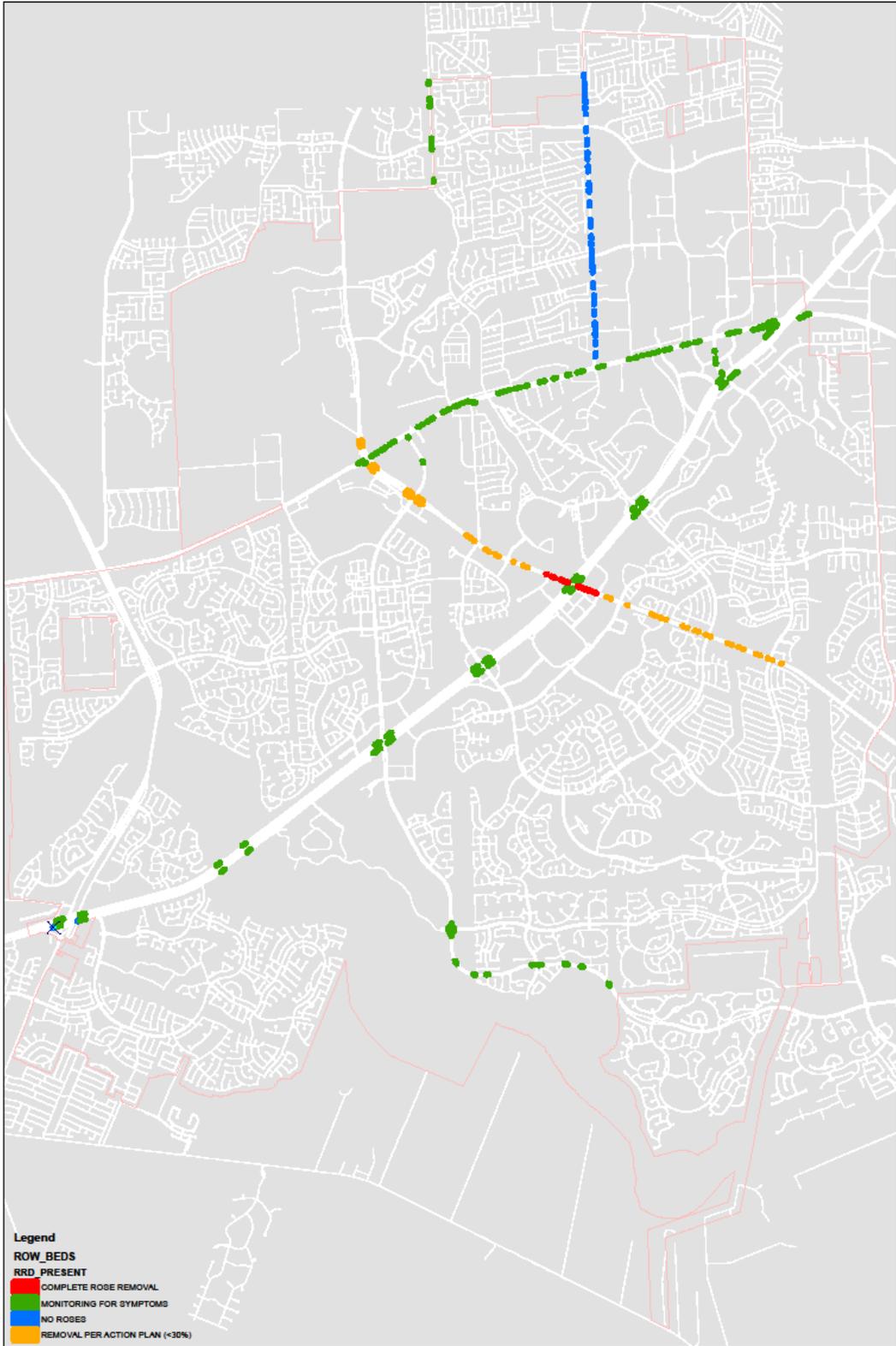
City of Sugar Land Right of Way Beautification Map

City of Sugar Land R.O.W. Planting Bed Locations & RRD Presence



CITY OF SUGAR LAND
ROW BEAUTIFICATION AREAS





CITY OF SUGAR LAND
 R.O.W PLANTING BED LOCATIONS
 PRESENCE OF ROSE ROSETTE DISEASE

