

Due Diligence / Initial Site Investigation

NEWHALL OLD TOWN MIXED USE

APN 2831-007-901 THROUGH 2831-007-907, 2891-007-900
AND 2931-007-908
LYONS AVENUE
CITY OF SANTA CLARA

PREPARED FOR:

OLD TOWN-MAIN, LLC
C/O SERRANO DEVELOPMENT GROUP, INC.
500 N. BRAND BLVD.
SUITE 2120
GLENDALE, CA 91203

PREPARED BY:

SITETECH, INC.
38248 POTATO CANYON RD.
OAK GLEN, CA. 92399
PH: (909) 864-3180

JASON B. MAYER



RCE 73222

December 21, 2015
DATE

Table of Contents

Project Overview	Pg. 3
Offsite Infrastructure Requirements	Pg. 4
Utility information	Pg. 5-6
FEMA Flood Analysis	Pg. 7
Preliminary Grading & Onsite Drainage	Pg. 7
SUSMP	Pg. 7
Governmental and Utility Contacts	Pg. 8
Appendix A: Preliminary Grading Plan	
Appendix B: Preliminary Onsite Drainage Study	
Appendix C: Preliminary SUSMP	
Appendix D: FEMA LOMAR	
Appendix E: Preliminary Railroad Crossing Improvement Plans	

Project Overview

The Newhall Old Town Mixed Use Project is a proposed mixed use development located at the intersection of Main Street and Lyons Avenue in the Newhall area of the City of Santa Clarita. The project will encompass the entire block that is surrounded by Main Street, Lyons Avenue, Railroad Avenue and 9th Street, and encompasses an area of 1.7 acres. The project will consist of a mixed use residential and commercial building, a 20,800 sq. ft. theater and a parking garage.

The mixed use residential/commercial building will consist of 46 residential units and 19,300 s.f. of commercial space. There will be one level of subterranean parking, ground floor retail, and residential lobby entry. The building configuration is 4 stories of Type VA construction over one level of commercial retail and one level of parking below grade of Type I construction.

There will be a central public plaza located adjacent to the proposed 4 story mixed use building, parking garage, and the new theater building. The design of the public plaza will need to be coordinated with the design of all three sites to determine the building requirements and utility services.

The development of the site will also provide the required utility and infrastructure improvements as necessitated by the project and as required by the City of Santa Clarita. This will consist of onsite sewer, water, storm drain, gas, electrical, data and phone service. Offsite improvements to Lyons Avenue, Railroad Avenue and 9th Street will also be necessary as required by the City of Santa Clarita.

The purpose of this report is to provide a general overview of the project and the improvements that will be necessary as part of the civil engineering scope of work. This is only a preliminary investigation based on the information currently known and understood about the project. As the project moves forward, additional information and requirements may become available, which could change or alter the findings found in this report. The scope and the requirements of the project may change from what is stated in this report as the development of the project progresses.

Offsite Infrastructure Requirements

Based on information attained from the City of Santa Clarita the following offsite improvements will be required to be constructed.

Lyons Avenue, Railroad Avenue and 9th Street will need to be improved in order to match the existing street improvements along Main Street. This likely will include new curb and gutter, decorative sidewalk, new streetlights, and landscaping. The exact nature and extents of the improvements will need to be coordinated with the City during the planning process.

The construction of a new nine foot wide turn pocket will be required along Railroad Avenue. This will include new curb and gutter, a new curb return and curb ramp at the corner of Railroad Avenue and 9th Avenue and additional right-of-way will need to be dedicated along Railroad Avenue. The extent of these improvements will need to be coordinated with the City.

As part of the site development the City will require that the existing above ground electrical and utility lines located along 9th street and Railroad Avenue be placed underground. This work will need to be coordinated with Southern California Edison and the utility providers which currently use the poles.

Although not a requirement for the development of the site, it is worth noting that the City of Santa Clarita is tentatively looking at extending Lyons Avenue to the northeast across Railroad Avenue, and across the existing railroad tracks, located adjacent to Railroad Avenue. If the City decides to go through with the project, an at grade railroad crossing would be constructed along Lyons Avenue. In order to create an at grade crossing, Lyons Avenue and Railroad Avenue would need to be raised approximately four to six feet. This would also raise Lyons Avenue and Railroad Avenue along the frontage of the subject property, putting the existing grade of the property below the street level. See Appendix E for preliminary improvement plans for the proposed railroad crossing.

The City is in the preliminary design and initial study phase of the railroad crossing project. As the design of the subject property moves forward, an ongoing conversation will need to be had with the City regarding the railroad crossing and the potential impacts it would have on the subject property. The design of the proposed mixed use building, theater, and parking garage will need to be coordinated with the City's railroad crossing project and may need to be designed to match the existing street conditions, and may need to also be compatible with the condition that the railroad crossing creates if and when the railroad crossing is constructed.

Utility Information

Sewer:

Existing sewer mains are located in Railroad Avenue, Main Street and 9th Street. Railroad Avenue contains an 8" sewer main that runs the entire length of the property, Main Street contains an 8" sewer main that runs the entire length of the property, and 9th Street contains an 18" sewer main that runs from the Alley to the west.

While it does appear that there is adequate capacity in the existing sewer mains to serve the project, the City will require that a sewer study be prepared to determine the capacity of the existing sewer mains and insure the project will not create an adverse condition.

Water:

Existing water mains are located in Railroad Avenue, Main Street and 9th Street. Railroad Avenue contains a 10" water main that runs the entire length of the property, Main Street contains a 24" water main that runs the entire length of the property, 9th Street contains a 6" water main that runs from the Alley to the west. Lyons Avenue contains a 6" water main that runs from the Alley to the west.

The preferred connection point would be the 24" line in Main Street, but a hydraulic model would need to be calculated to determine which pipe would best provide the needed flows. Once the number and size of services are determined the water district can prepare a hydraulic model to determine the best connection points.

There is also an existing 2" water line and 20' wide easement which run through the middle of the property in the location of the old abandoned alley. The easement and water line are owned by Newhall County Water District and will need to be removed and vacated as part of the project. The easement was recorded in Book 23285, Page 341 of Official Records on June 20, 1946.

Storm Drain:

Existing City storm drains are located along Main, Lyons and Railroad Avenue. We do not anticipate having to tie into any existing storm drains as part of the development of the site. Runoff will be conveyed to the perimeter streets.

However, there are existing storm drain catch basins located along Lyons Avenue and Railroad Avenue that may need to be relocated as part of the offsite street improvements. An analysis of the extent of the relocation can be determined once final project conditions are received from the City.

There is an existing storm drain easement located at the northwesterly edge of the site that will need to be vacated. The easement was recorded as Instrument No. 4111 on December 17, 1971.

Electricity:

Electric service for the project will be provided by Southern California Edison. Edison has adequate facilities in the area to serve the project. As part of the site development the City will require that the existing above ground electrical lines and utility lines located along 9th street and Railroad Avenue be placed underground. This work will need to be coordinated with Southern California Edison.

Gas:

Gas service for the project will be provided by Southern California Gas Company. The gas company has been contacted but as of the date of this report has not responded to our request to verify service. However, we do not anticipate any substantial issues regarding gas service.

Phone/Cable:

Phone service for the project will be provided by AT&T. AT&T has been contacted but as of the date of this report has not responded to our request to verify service. However, we do not anticipate any substantial issues regarding phone service.

FEMA Flood Analysis

The subject property is located in FEMA flood Zone X (shaded) as shown on LOMR 12-09-281P, effective 08/09/2013. Zone X (shaded) is not a special flood hazard area therefore no specific site improvements are necessary to protect the site from regional flooding.

Preliminary Grading and Onsite Drainage

In its existing condition, the drainage on the subject site flows from the southeast to the northwest in a predominately sheet flow condition. The runoff is conveyed to the adjacent streets which convey the runoff to existing City storm drains.

The grading design of the site will need to consider two conditions, one which the project matches up with the existing street grades as they currently exist and the second where the project takes into consideration the proposed railroad crossing in which Lyons Avenue and Railroad Avenue will be raised.

When developed we anticipate that the drainage from the site will be conveyed to the perimeter streets via sheet flow and onsite storm drains. Per SUSMP requirements the first ¾" of rain will be captured and conveyed to an infiltration system. The majority of the necessary grading onsite will be the excavation for the underground parking garage and the required sub excavation and pad construction for the proposed on grade structures.

SUSMP

Per the City of Sana Clarita and Los Angeles County standards, the first ¾" of rain will need to be captured and treated onsite. We anticipate that this will be done via an infiltration system. Runoff from the site will be captured in onsite catch basins and conveyed to an infiltration system located below the proposed structure. Rain water in excess of the volume that is required to be treated will be conveyed to the perimeter streets via surface flow or onsite storm drain. The proposed infiltration system will consist of an infiltration trench or drywells depending on the site constraints and geotechnical recommendations.

The following is a list of governmental agencies and utility providers that serve the subject property:

City of Santa Clarita

23920 W. Valencia Blvd.
Santa Clarita, CA 91355
661-255-4330
Contact: Trolis Niebla
661-255-4947
TNIEBLA@santa-clarita.com

Sewer

City of Santa Clarita
Development Services
23920 W. Valencia Blvd.
Santa Clarita, CA 91355
661-255-4942
&
LA County Sanitation District
1955 Workman Mill Road
Whittier, CA 90601
(562) 699-7411

Water

Newhall County Water District
23780 North Pine ST
Newhall, CA 91321
661- 259-3610
Contact: Mike Alvord

Storm Drain

City of Santa Clarita
Development Services
23920 W. Valencia Blvd.
Santa Clarita, CA 91355
661-255-4942

Electricity

Southern California Edison
Josh Yanez
Southern California Edison
Tract Project Management | Project
Manager
Ventura Regional Office | 10180
Telegraph Rd. | Ventura, CA 93004
T: 805.654.7486 | F: 661.607.0592 | C:
661.476.0560 | Pax: 79486
Joshua.yanez@sce.com

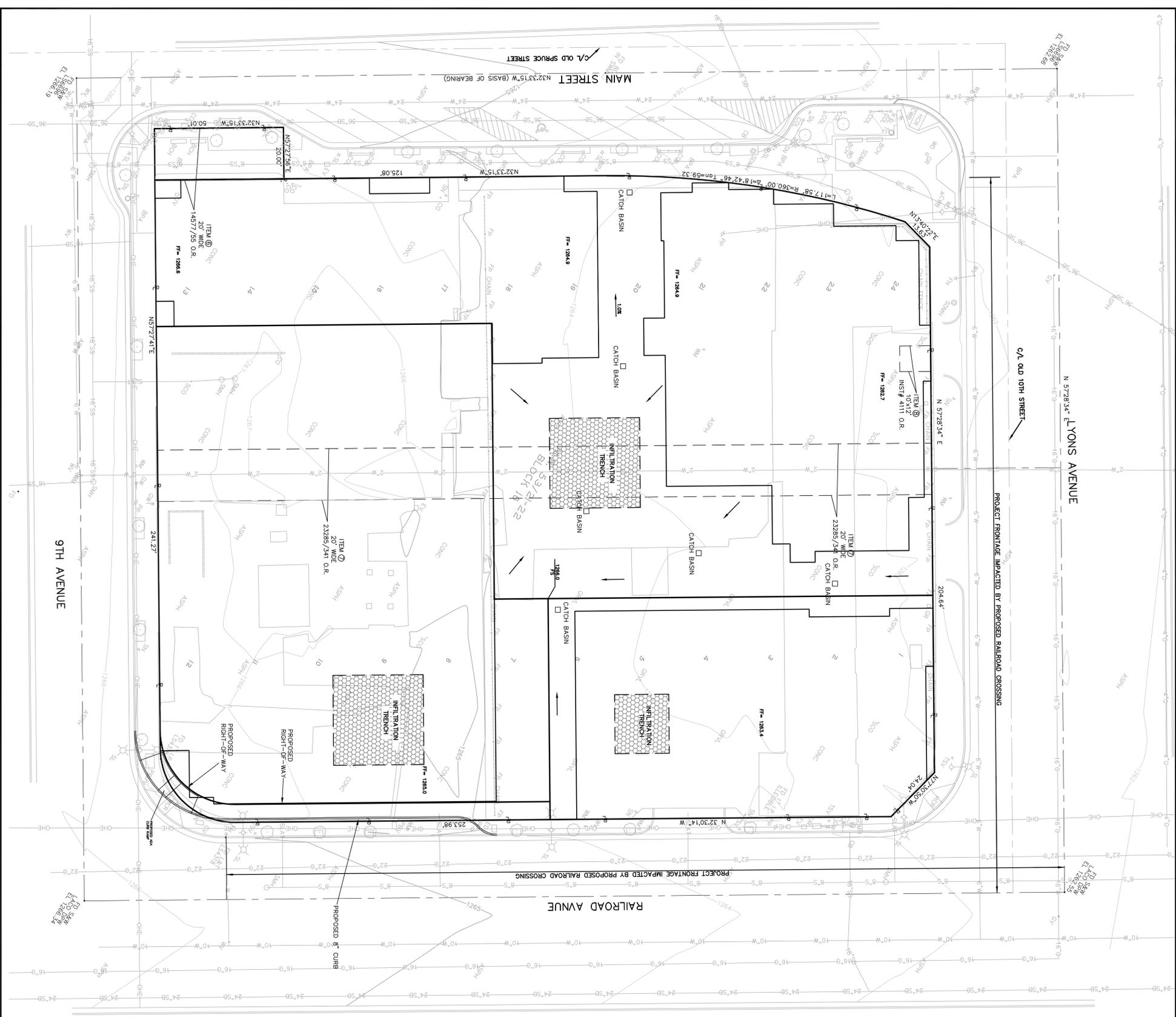
Gas

Southern California Gas Company
www.socalgas.com

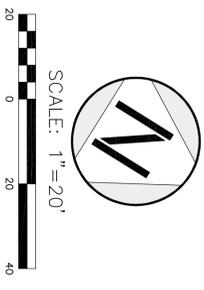
Phone / Cable

AT&T
Rod Kendricks
818-325-9847
rk6373@att.com

Appendix A: Preliminary Grading Plan



- LEGEND:**
- - - - - INDICATES EXISTING CONTOUR
 - - - - - INDICATES STREET CENTERLINE
 - - - - - INDICATES CURB LINE
 - - - - - INDICATES PROPERTY LINE
 - - - - - INDICATES RIGHT-OF-WAY LINE
 - - - - - INDICATES FLOW LINE
 - - - - - INDICATES SLOPE
 - - - - - INDICATES CONCRETE PAVING
 - - - - - INDICATES EXIST. CONCRETE TO BE REMOVED
 - - - - - INDICATES TOP OF CURB
 - - - - - INDICATES FLOW LINE
 - - - - - INDICATES FINISH SURFACE
 - - - - - INDICATES HIGH POINT
 - - - - - INDICATES FINISH GRADE
 - - - - - INDICATES DOWN SPOUT
 - - - - - INDICATES TOP OF WALL
 - - - - - INDICATES EXISTING GRADE
 - - - - - INDICATES PROPOSED GRADE





SITECH INC.

38248 POTATO CANYON RD., OAK GLEN, CALIFORNIA 92299
 PH: (959)564-5180, FAX: (959)564-0850

BERNHARD K. MAYER R.C.E. 36866 DATE

PRELIMINARY GRADING PLAN

CITY OF SANTA CLARITA

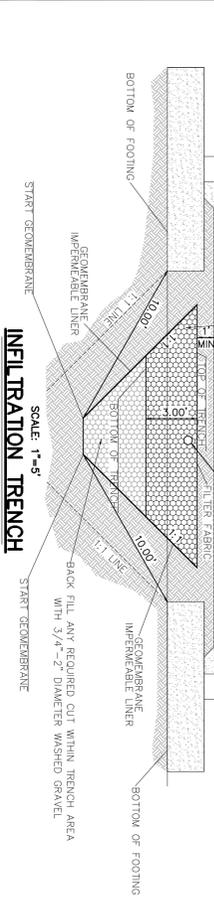
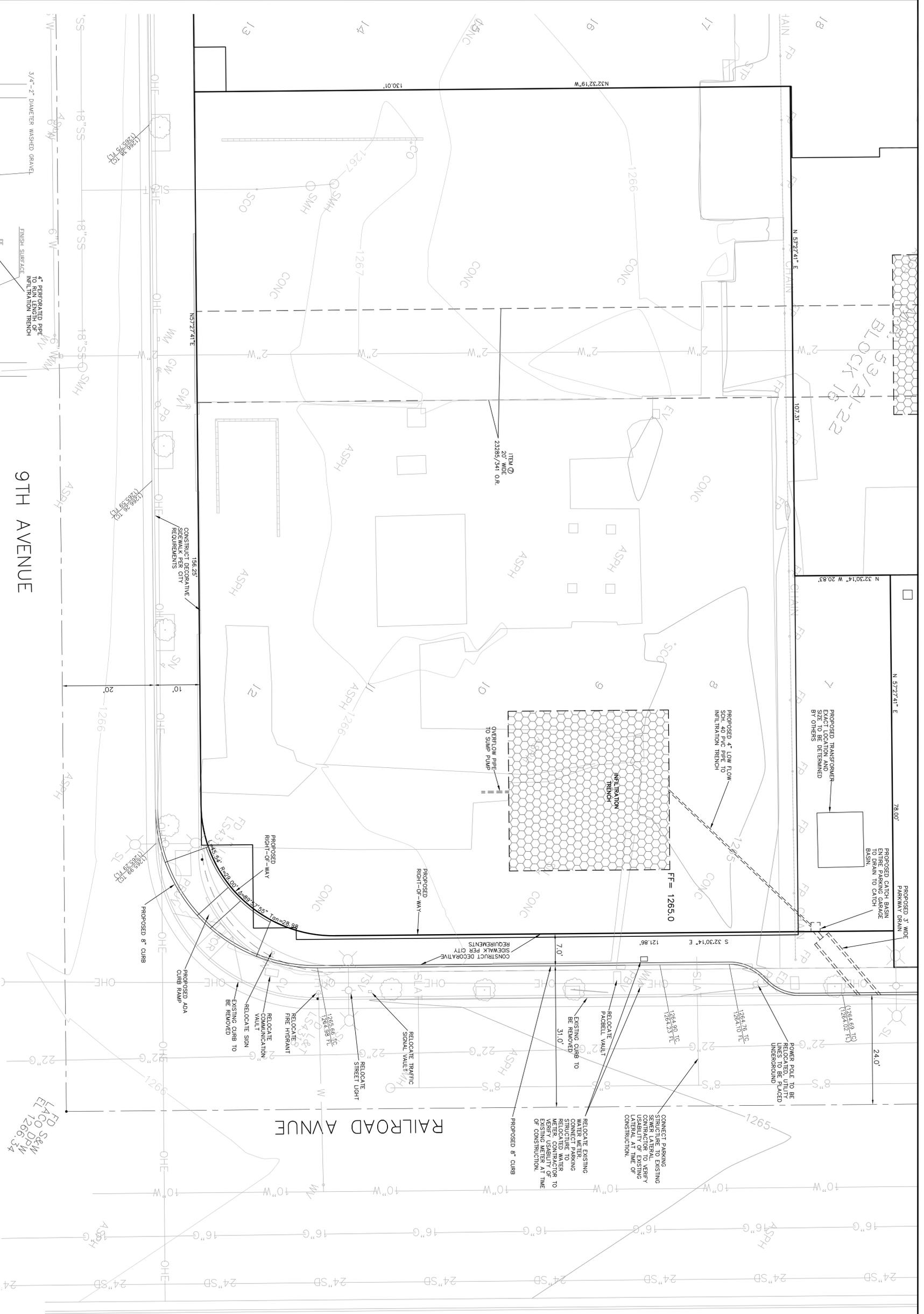
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PREPARED FOR: MAILING ADDRESS: SITE ADDRESS:

DATE: DECEMBER 21, 2015

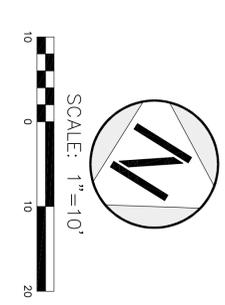
SCALE: 1" = 20'

PHONE: SHEET: 1 OF 1



- LEGEND:**
- - - - - INDICATES EXISTING CONTOUR
 - - - - - INDICATES STREET CENTERLINE
 - - - - - INDICATES CURB LINE
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 - - - - - INDICATES FINISH SURFACE
 - - - - - INDICATES HIGH POINT
 - - - - - INDICATES FINISH GRADE
 - - - - - INDICATES DOWN SPOUT
 - - - - - INDICATES TOP OF WALL
 - - - - - INDICATES EXISTING GRADE
 - - - - - INDICATES PROPOSED GRADE

- TC - INDICATES TOP OF CURB
- FL - INDICATES FLOW LINE
- FS - INDICATES FINISH SURFACE
- HP - INDICATES HIGH POINT
- FG - INDICATES FINISH GRADE
- DS - INDICATES DOWN SPOUT
- TW - INDICATES TOP OF WALL
- (00.00) - INDICATES EXISTING GRADE
- 00.00 - INDICATES PROPOSED GRADE



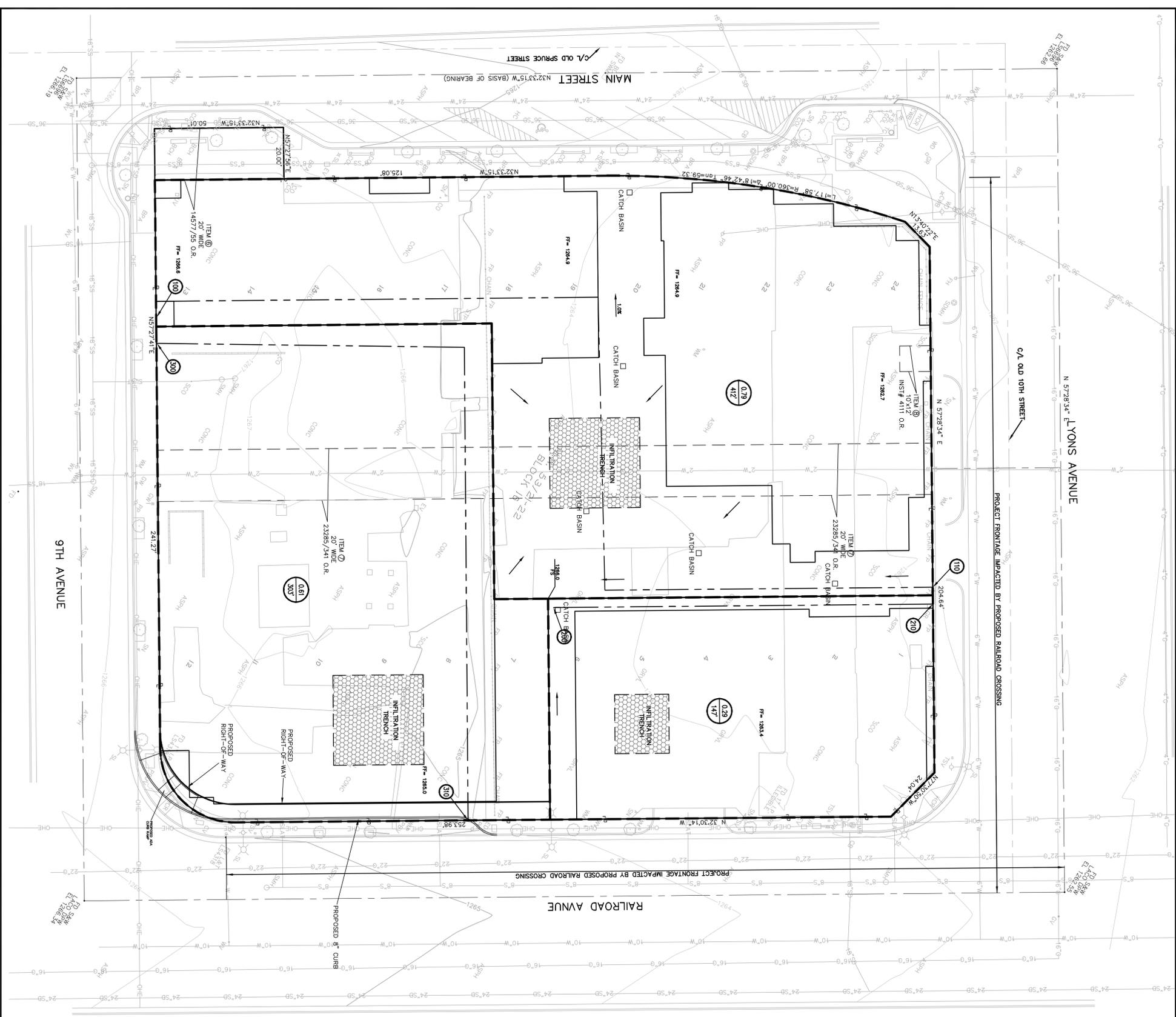
STETECH INC.
 38248 POTATO CANYON RD., OAK GLEN, CALIFORNIA 92299
 PH: (909)984-3180, FAX: (909)984-0850

BERNHARDT K. MAYER R.C.E. 36886 DATE

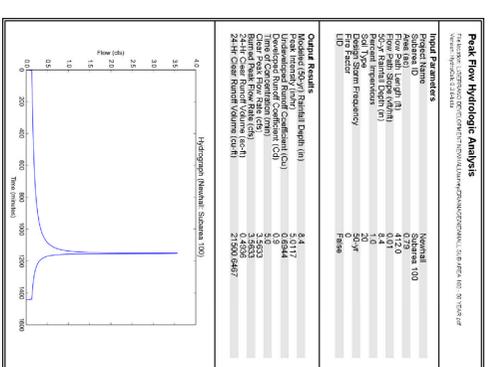
CITY OF SANTA CLARITA
PRELIMINARY GRADING/STREET PLAN
PARKING STRUCTURE
SERRANO DEVELOPMENT

PREPARED FOR: SERRANO DEVELOPMENT
 DATE: DECEMBER 16, 2015
 MAILING ADDRESS: SITE ADDRESS:
 PHONE: SHEET: 1 OF 1

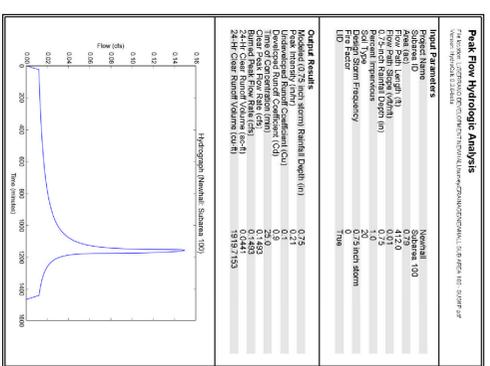
Appendix B: Preliminary Onsite Drainage Study



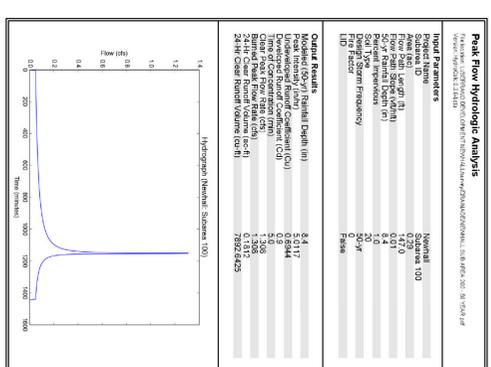
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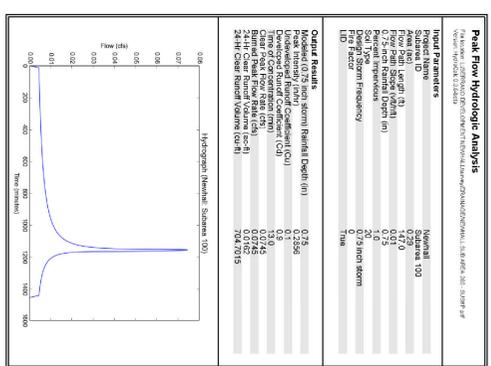
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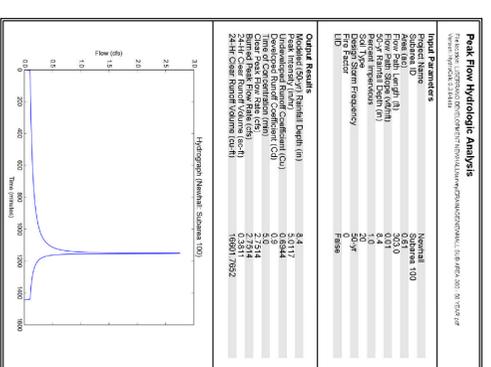
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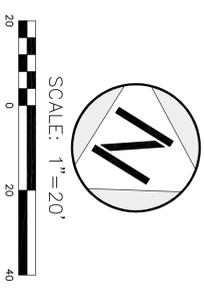
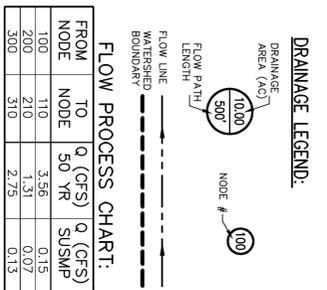
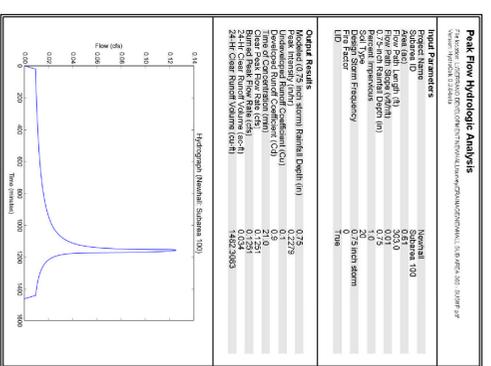
SUB-AREA 200 / SUSMP EVENT



SUB-AREA 300 / 50 YEAR EVENT



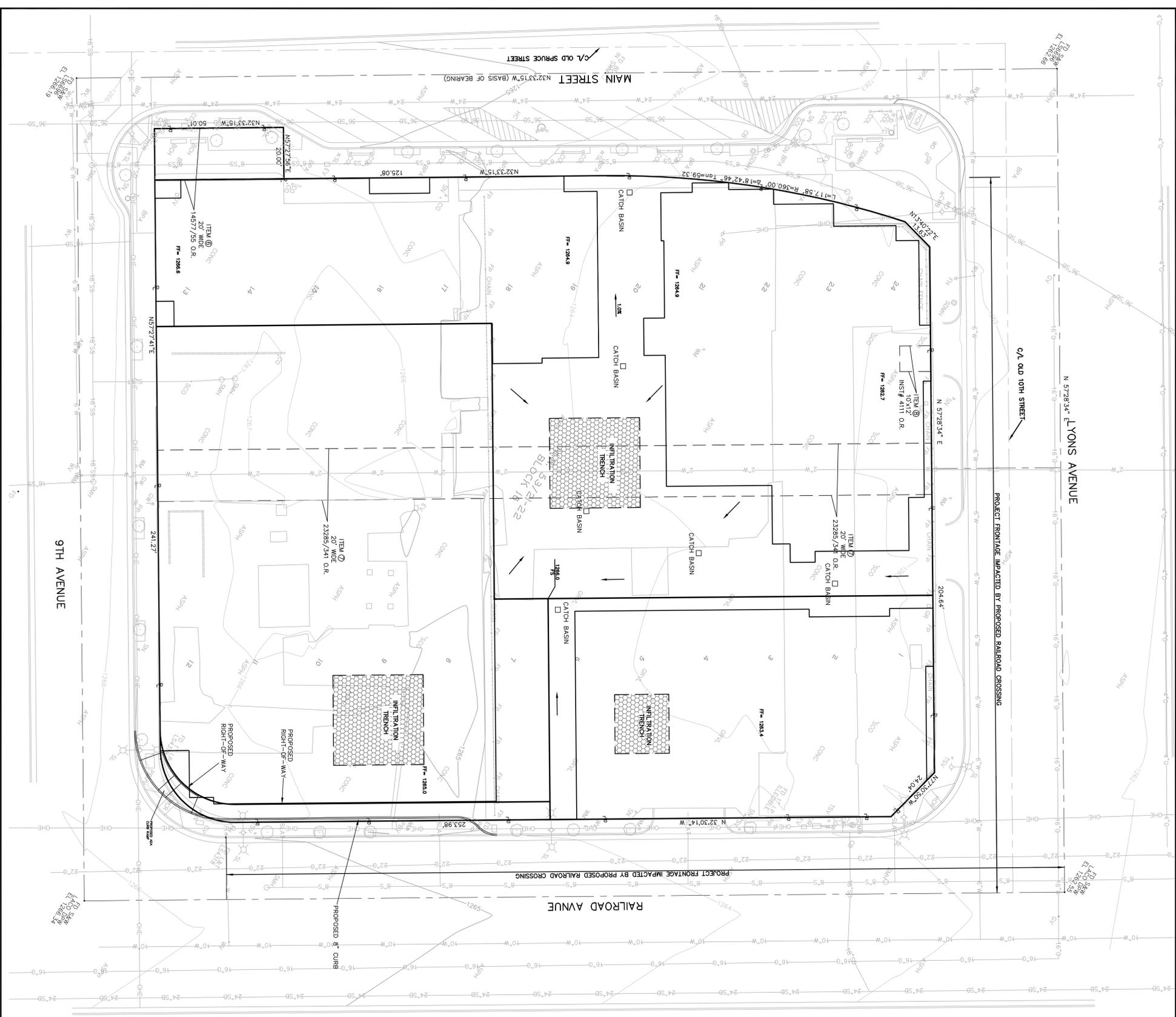
SUB-AREA 300 / SUSMP EVENT



38248 POTATO CANYON RD., OAK GLEN, CALIFORNIA 92259
 PH: (909)564-5180, FAX: (909)564-0850

CITY OF SANTA CLARITA
PRELIMINARY DRAINAGE STUDY
 PREPARED FOR: **SERRANO DEVELOPMENT**
 DATE: **DECEMBER 21, 2015**
 MAILING ADDRESS: _____
 SITE ADDRESS: _____
 PHONE: _____
 SHEET: **1 OF 1**

Appendix C: Preliminary SUSMP



LEGEND:

- INDICATES EXISTING CONTOUR
- INDICATES STREET CENTERLINE
- INDICATES CURB LINE
- INDICATES PROPERTY LINE
- INDICATES RIGHT-OF-WAY LINE
- INDICATES FLOW LINE
- INDICATES SLOPE
- INDICATES CONCRETE PAVING
- INDICATES EXIST. CONCRETE TO BE REMOVED
- INDICATES TOP OF CURB
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- INDICATES FINISH SURFACE
- INDICATES HIGH POINT
- INDICATES FINISH GRADE
- INDICATES DOWN SPOUT
- INDICATES TOP OF WALL
- INDICATES EXISTING GRADE
- INDICATES PROPOSED GRADE

MIXED USE LOT

3/4 Inch Volume (LxW)

W' req'd for = 2722.5 cf/acre
 V = 1772.5 CF / ASFD x [(A)(0.9) + (AP+ AU)(CU)]
 AP = 0.0 ACRES
 CU = 0.1

WM = (2722.5 cf/acre) x [(0.79)(0.9)]
 WM = 1935.70 cf

Infiltration Rate:

keat, design = keat, measured / Factor of safety
 keat, design = 5.8 in/hr / 3 = 1.933 in/hr

Infiltration Trench Design:

Volume of Trench required
 Grovel void ratio = 40%
 Volume of Trench required = 1935.70 / 0.4 = 4839.25 cf
 Actual Volume of Trench = 4839.25 cf = 4839.25 DK

Area required to infiltrate within 48 hours:

Amin = (Volume x 12 in/hr) / (48 hrs x keat, design)
 Amin = (4839.25 x 12 in/hr) / (48 hrs x 1.933 in/hr)
 Amin = 250 ft² > 250 ft² OK
 Actual Infiltration Area = 250 ft² > 250 ft² OK

THEATER PARCEL

3/4 Inch Volume (LxW)

W' req'd for = 2722.5 cf/acre
 V = 1772.5 CF / ASFD x [(A)(0.9) + (AP+ AU)(CU)]
 AP = 0.0 ACRES
 CU = 0.1

WM = (2722.5 cf/acre) x [(0.79)(0.9)]
 WM = 711 cf

Infiltration Rate:

keat, design = keat, measured / Factor of safety
 keat, design = 5.8 in/hr / 3 = 1.933 in/hr

Infiltration Trench Design:

Volume of Trench required
 Grovel void ratio = 40%
 Volume of Trench required = 711 / 0.4 = 1777.5 cf
 Actual Volume of Trench = 1778 cf > 1778 DK

Area required to infiltrate within 48 hours:

Amin = (Volume x 12 in/hr) / (48 hrs x keat, design)
 Amin = (1777.5 x 12 in/hr) / (48 hrs x 1.933 in/hr)
 Amin = 92 ft² > 92 ft² OK
 Actual Infiltration Area = 92 ft² > 92 ft² OK

PARKING GARAGE PARCEL

3/4 Inch Volume (LxW)

W' req'd for = 2722.5 cf/acre
 V = 1772.5 CF / ASFD x [(A)(0.9) + (AP+ AU)(CU)]
 AP = 0.0 ACRES
 CU = 0.1

WM = (2722.5 cf/acre) x [(0.61)(0.9)]
 WM = 1485 cf

Infiltration Rate:

keat, design = keat, measured / Factor of safety
 keat, design = 5.8 in/hr / 3 = 1.933 in/hr

Infiltration Trench Design:

Volume of Trench required
 Grovel void ratio = 40%
 Volume of Trench required = 1485 / 0.4 = 3712.5 cf
 Actual Volume of Trench = 3734 cf > 3734 DK

Area required to infiltrate within 48 hours:

Amin = (Volume x 12 in/hr) / (48 hrs x keat, design)
 Amin = (3734 x 12 in/hr) / (48 hrs x 1.933 in/hr)
 Amin = 193 ft² > 193 ft² OK
 Actual Infiltration Area = 193 ft² > 193 ft² OK



SCALE: 1" = 20'



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BERNHARD K. MAYER R.C.E. 36866 DATE

PRELIMINARY SUSMP PLAN

CITY OF SANTA CLARITA

SERRANO DEVELOPMENT

PREPARED FOR: MAILING ADDRESS: SITE ADDRESS:

DATE: DECEMBER 21, 2015 PHONE: SHEET: 1 OF 1

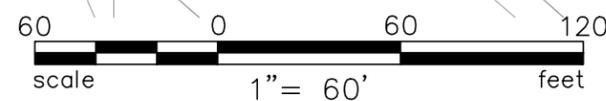
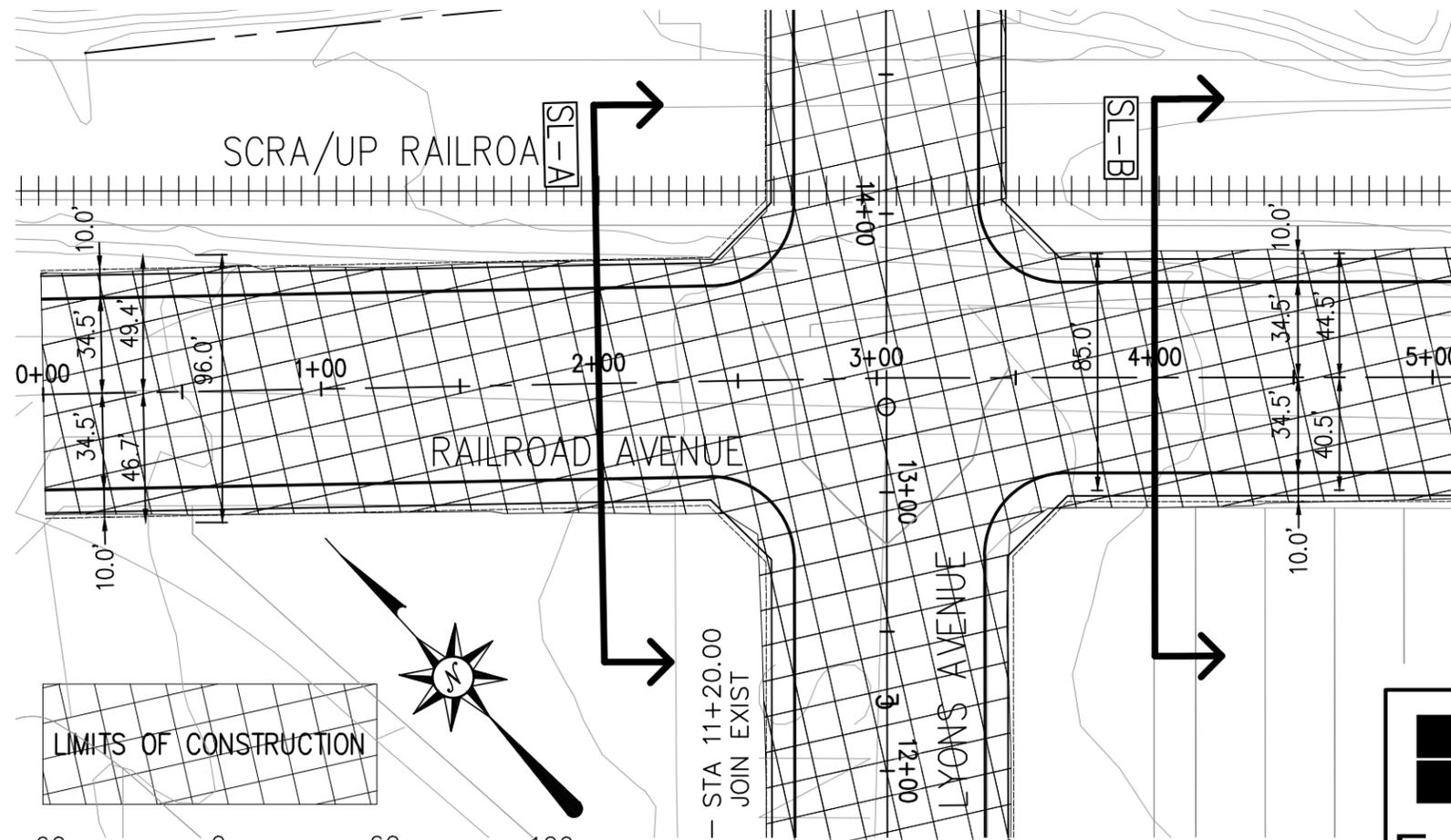
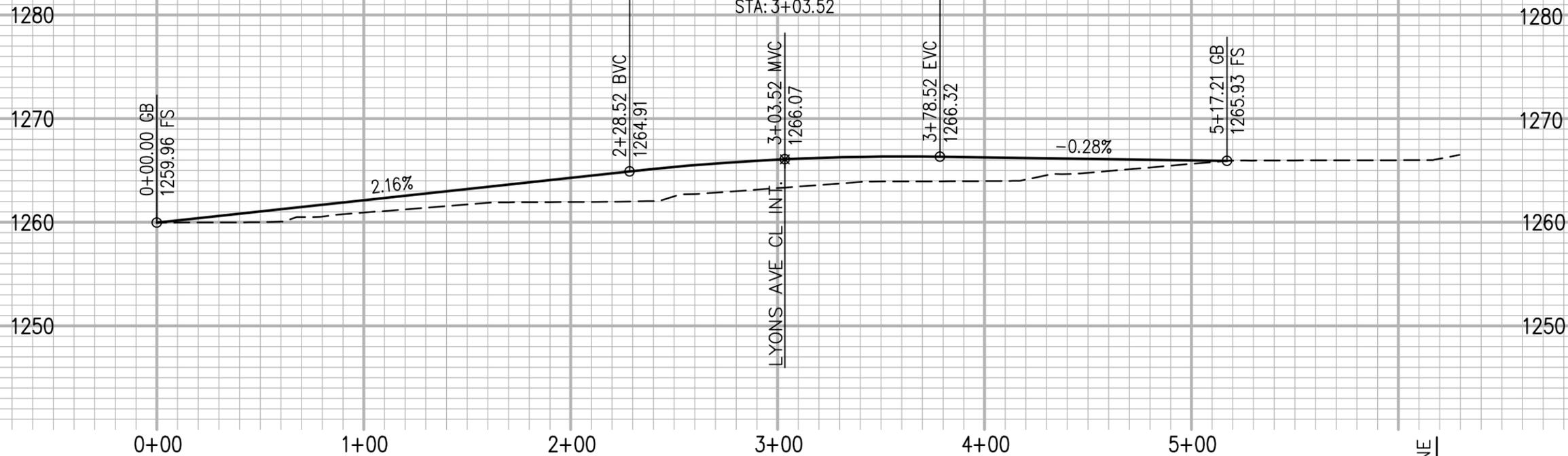
SCALE: 1" = 20'

Appendix D: FEMA LOMAR

Appendix E: Preliminary Railroad Crossing Improvement Plans

**RAILROAD AVE EXHIBIT
PROPOSED RR X-ING**

PROFILE SCALES
 HORIZ. 1"=60'
 VERT. 1"=5'



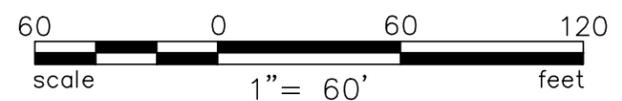
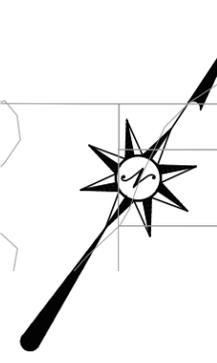
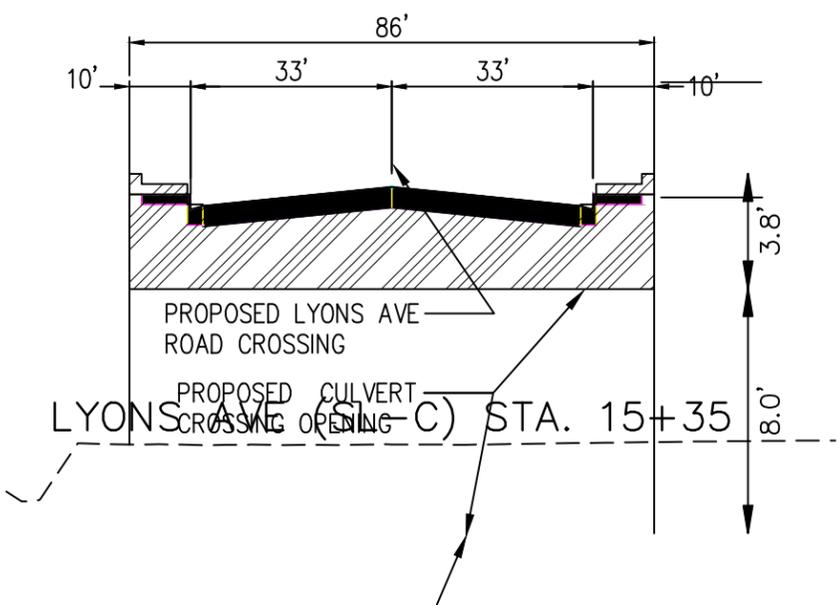
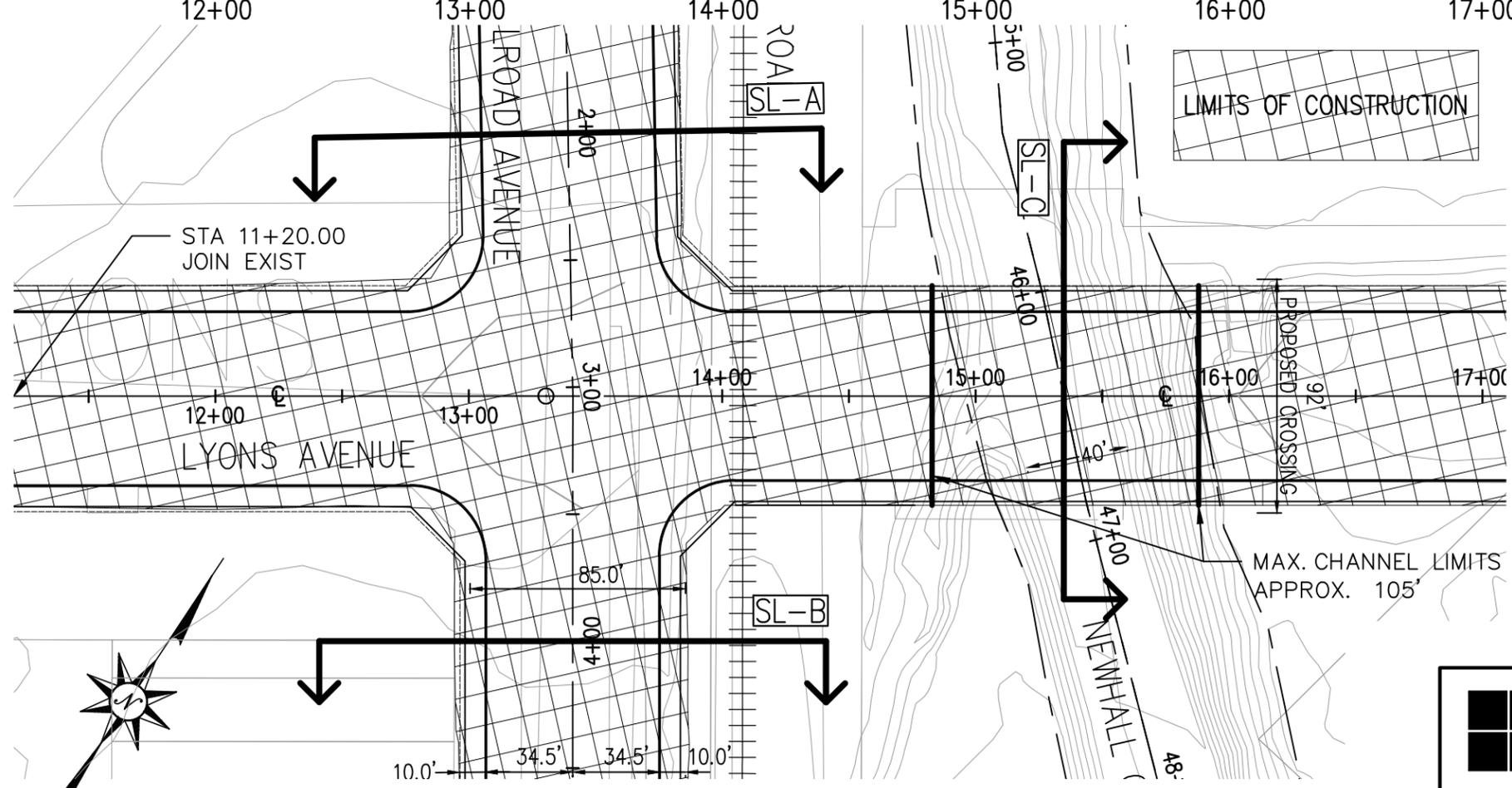
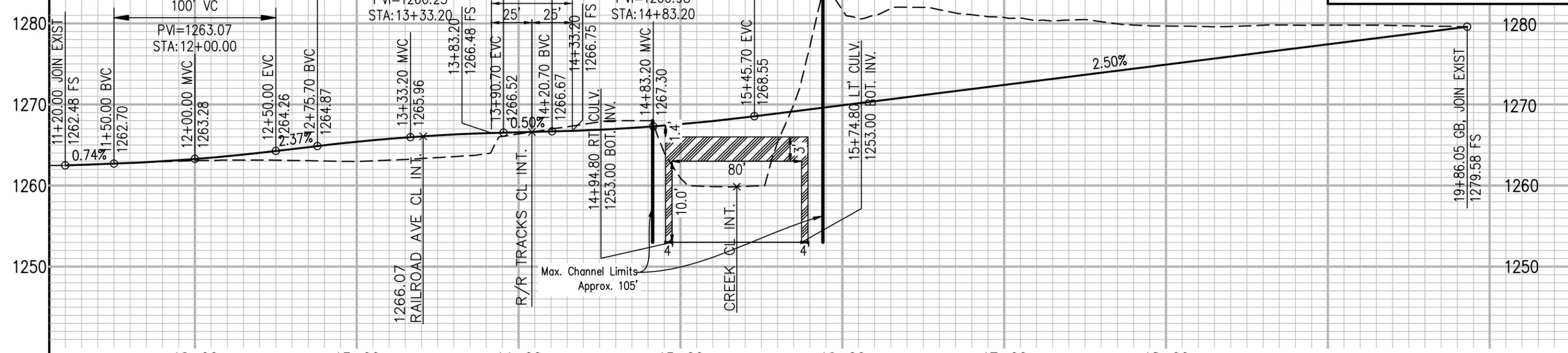
Hall & Foreman, Inc.
Engineering • Planning • Surveying
 25152 SPRINGFIELD COURT, SUITE 350 • SANTA CLARITA, CA 91355 • 661-284-7400

Job Number:	120197.0001
Date:	08-04-2015
Scale:	1"=60'
Sheet 1 of	2 Sheets

Drawing Name: P:\H\F\00000011\0400CAD\EC\EXHIBITS\Lyons Ave - Newhall Creek & RR Crossing.dwg
 Newhall Creek & RR Crossing.dwg
 Last Opened: Dec 17, 2015 - 11:04am by: sjq

**LYONS AVE EXHIBIT
PROPOSED RR X-ING**

PROFILE SCALES
HORIZ. 1"=60'
VERT. 1"=5'



Hall & Foreman, Inc.
Engineering • Planning • Surveying
25152 SPRINGFIELD COURT, SUITE 350 • SANTA CLARITA, CA 91355 • 661-284-7400

Job Number:	120197.0001
Date:	08-04-2015
Scale:	1"=60'
Sheet 2 of	2 Sheets

Drawing Name: P:\H\F\100000011\0400CAD\EC\EXHIBITS\Lyons Ave - Newhall Creek & RR Crossing.dwg
 Last Opened: Dec 17, 2015 - 11:05am by: sjq