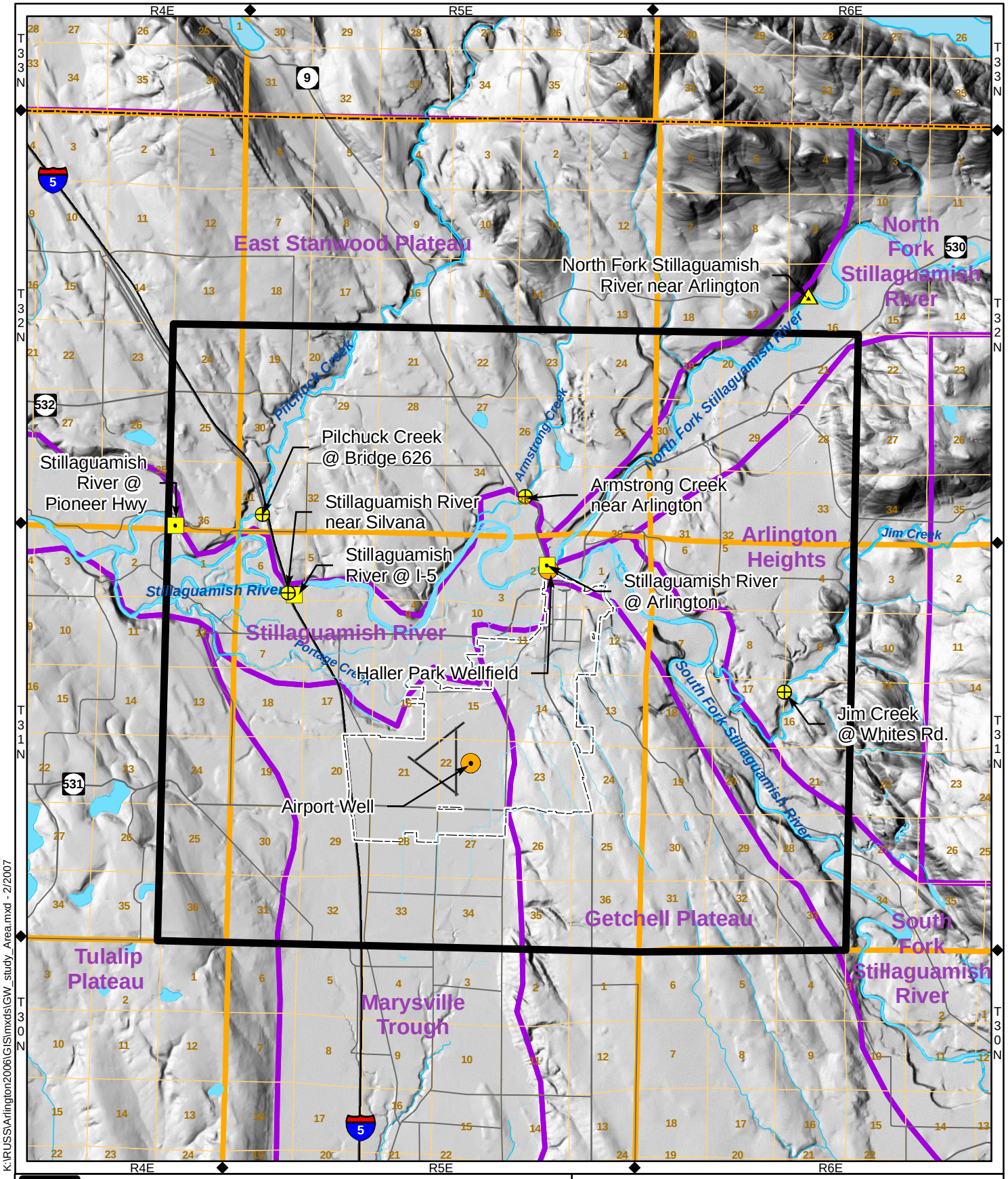
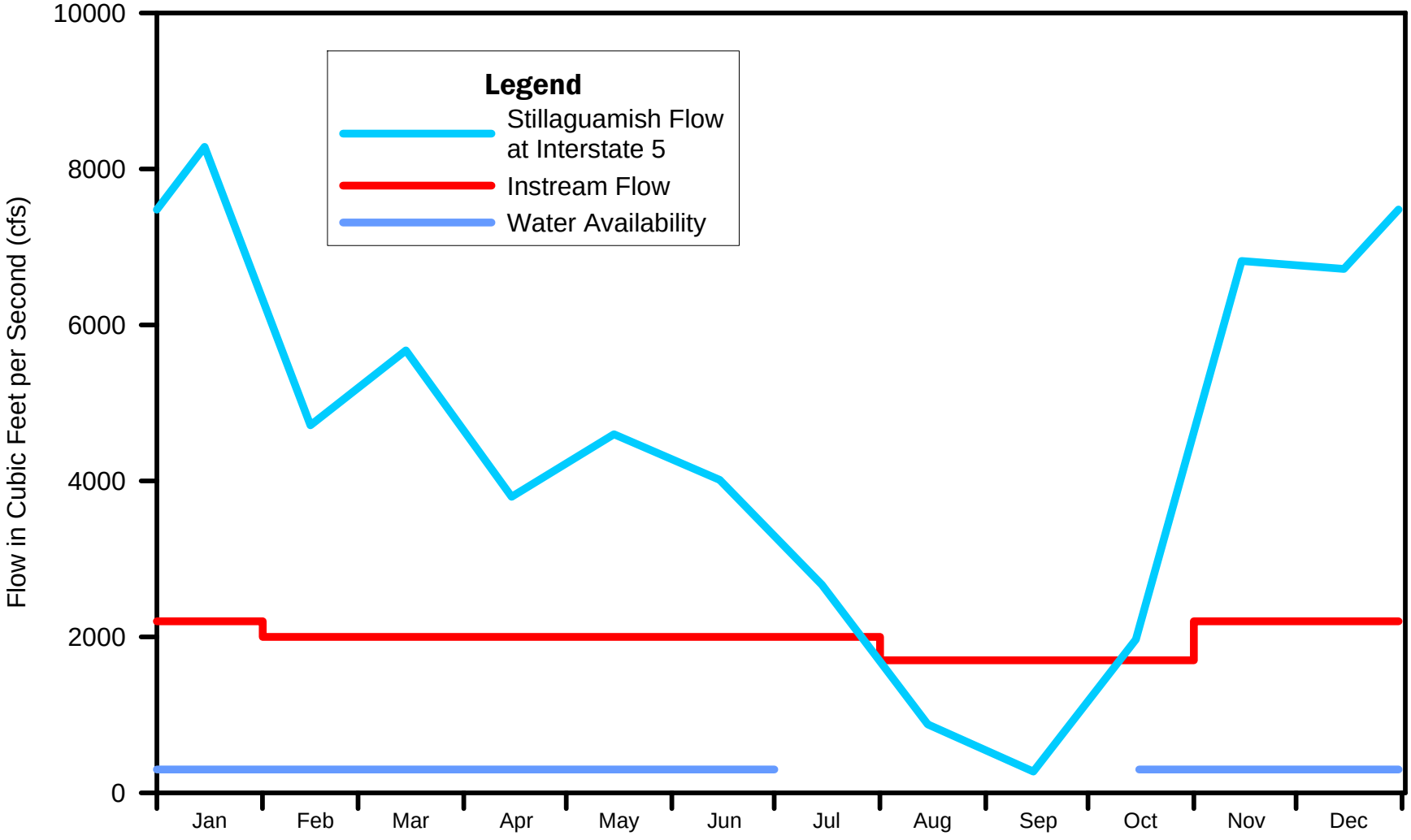


FIGURE 1
GROUNDWATER STUDY AREA WITH PHYSIOGRAPHIC AREAS

CITY OF ARLINGTON

PgG

K:\RUSS\Arlington2006\GIS\mxds\GW_study_Area.mxd - 2/2007

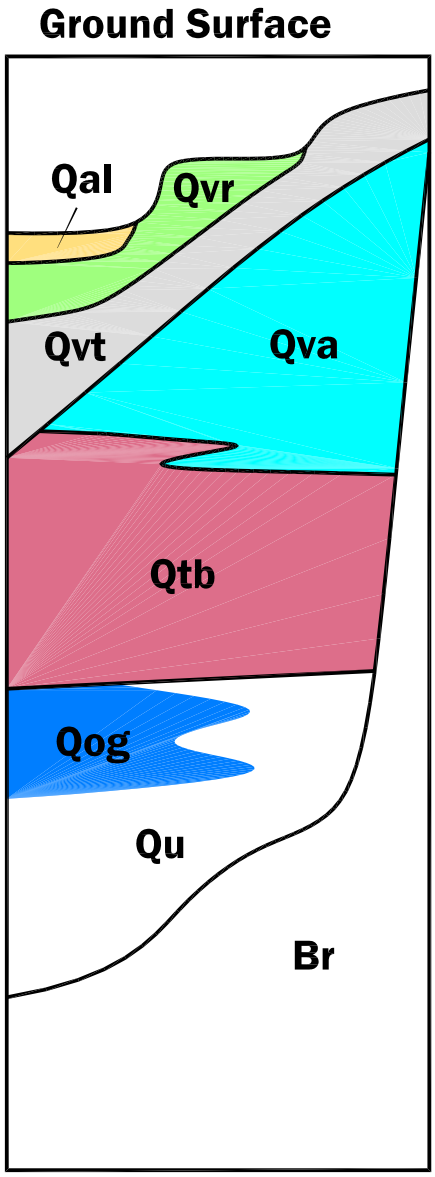


Flow data from gauge are shown as average daily flow per month. Stillaguamish flow at Interstate 5 is from Snohomish County gauge with a period of record from 12-6-96 to 8-6-99. Average daily flow per month is indicated on the 15th of each month.

FIGURE 2
INSTREAM FLOW QUANTITIES

CITY OF ARLINGTON

PgG



Hydrogeologic Units

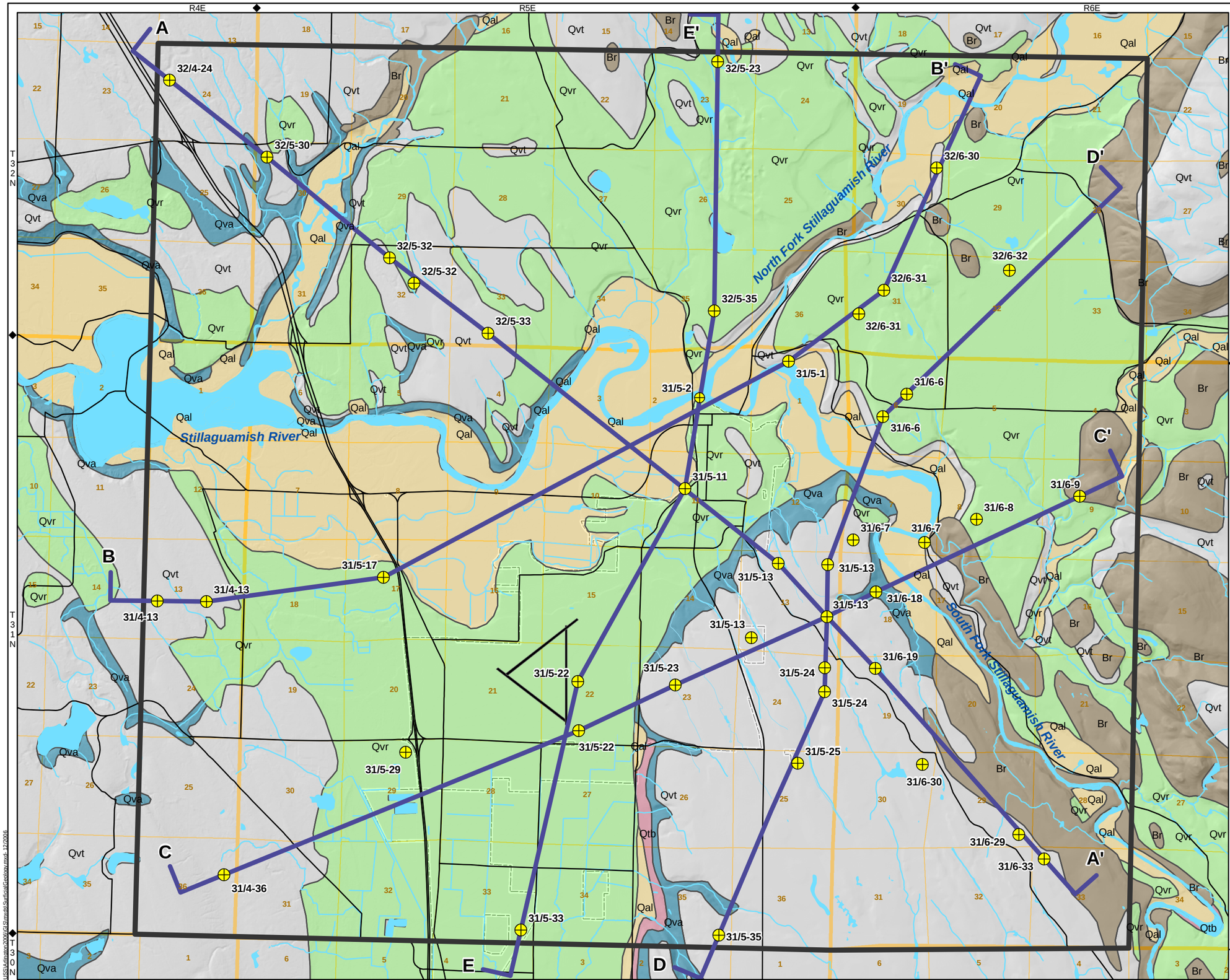
Qal	River Alluvium
Qvr	Vashon Recessional Outwash
Qvt	Vashon Till
Qva	Vashon Advance Outwash
Qtb	Transitional Beds
Qog	Older Gravel
Qu	Quaternary Undifferentiated
Br	Bedrock

Section 4.2.3 in the text presents desciptions of each of these hydrogeologic units.

FIGURE 3
STRATIGRAPHIC COLUMN

CITY OF ARLINGTON

PgG



Legend

- Groudwater Study Area
- Wells Used In Cross-Sections
- Cross-Secion Allignments

Surficial Geology

- River Alluvium (Qal)
- Vashon Recessional Outwash (Qvr)
- Vashon Till (Qvt)
- Vashon Advance Outwash (Qva)
- Transitional Beds (Qtb)
- Bedrock (Br)
- Rivers
- Water Bodies

0 Feet 5,000

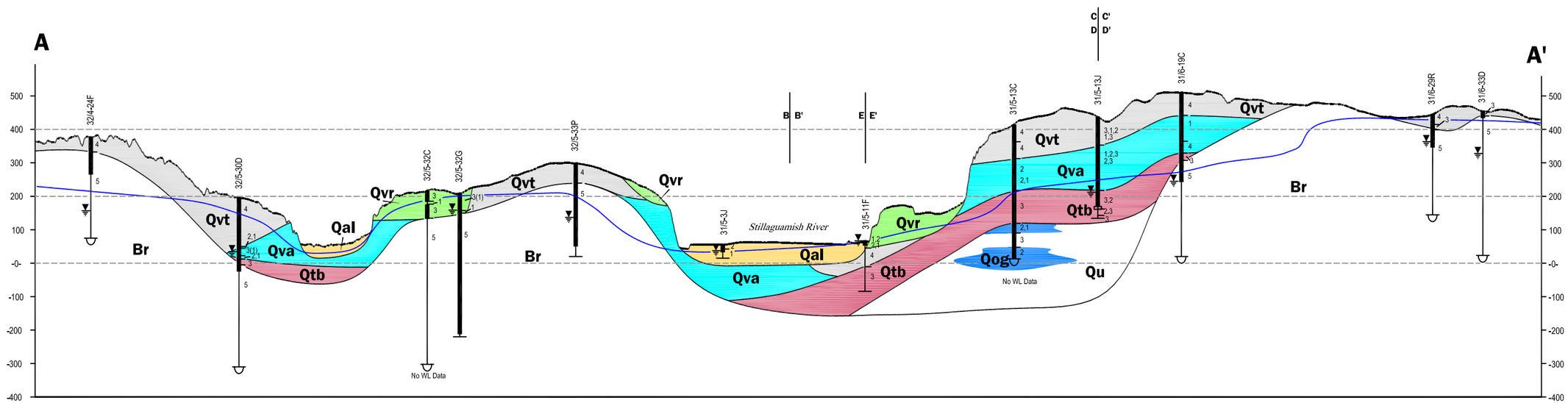
N

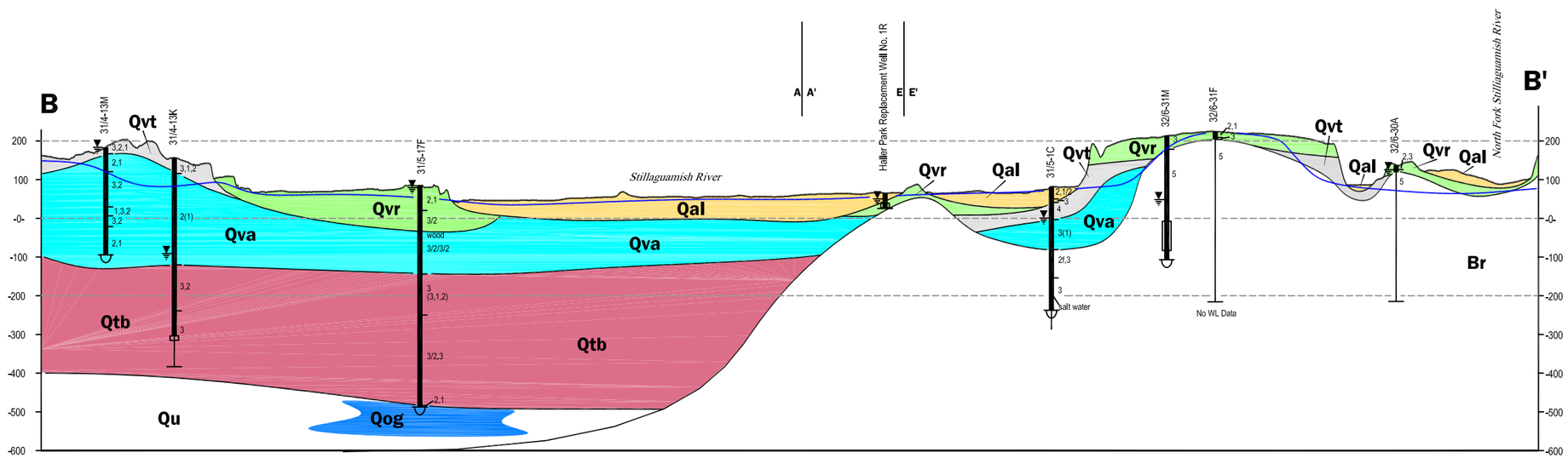
FIGURE 4

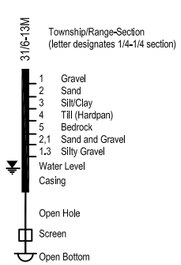
SURFICIAL GEOLOGY & CROSS-SECTION TRACES

CITY OF ARLINGTON

PgG







LEGEND

Qal	River Alluvium
Qvr	Vashon Recessional Outwash
Qvt	Vashon Till
Qva	Vashon Advance Outwash
Qtb	Transitional Beds
Qog	Older Gravel
Qu	Quaternary Undifferentiated
Br	Bedrock

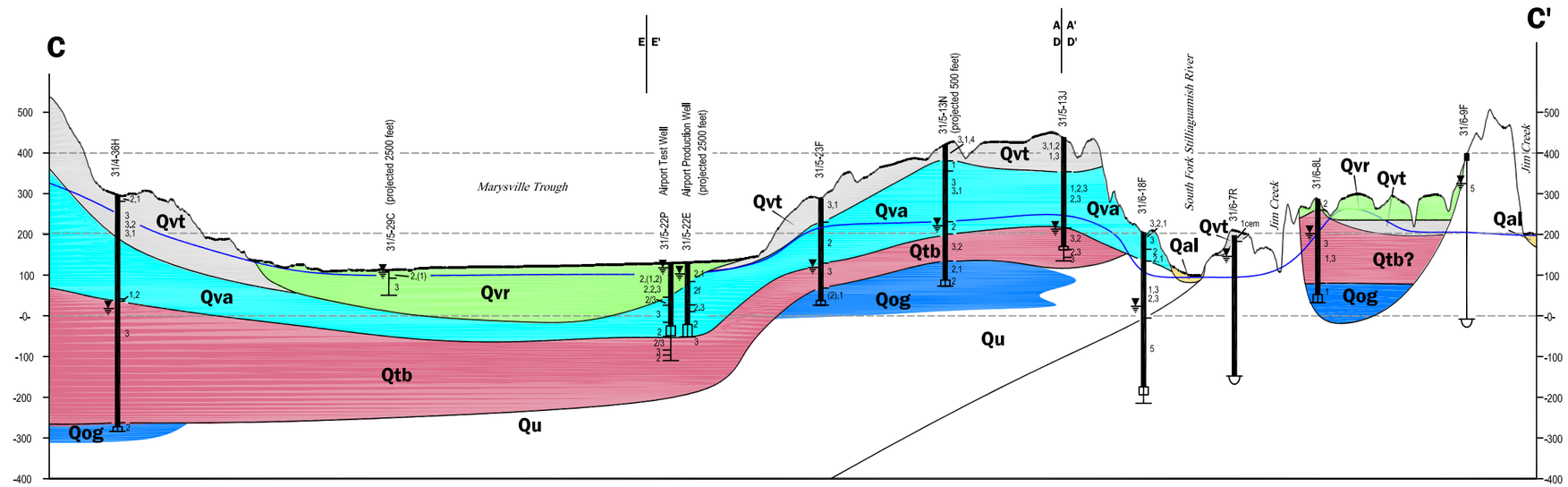
0 2500 5000 10,000
Horizontal Scale in Feet

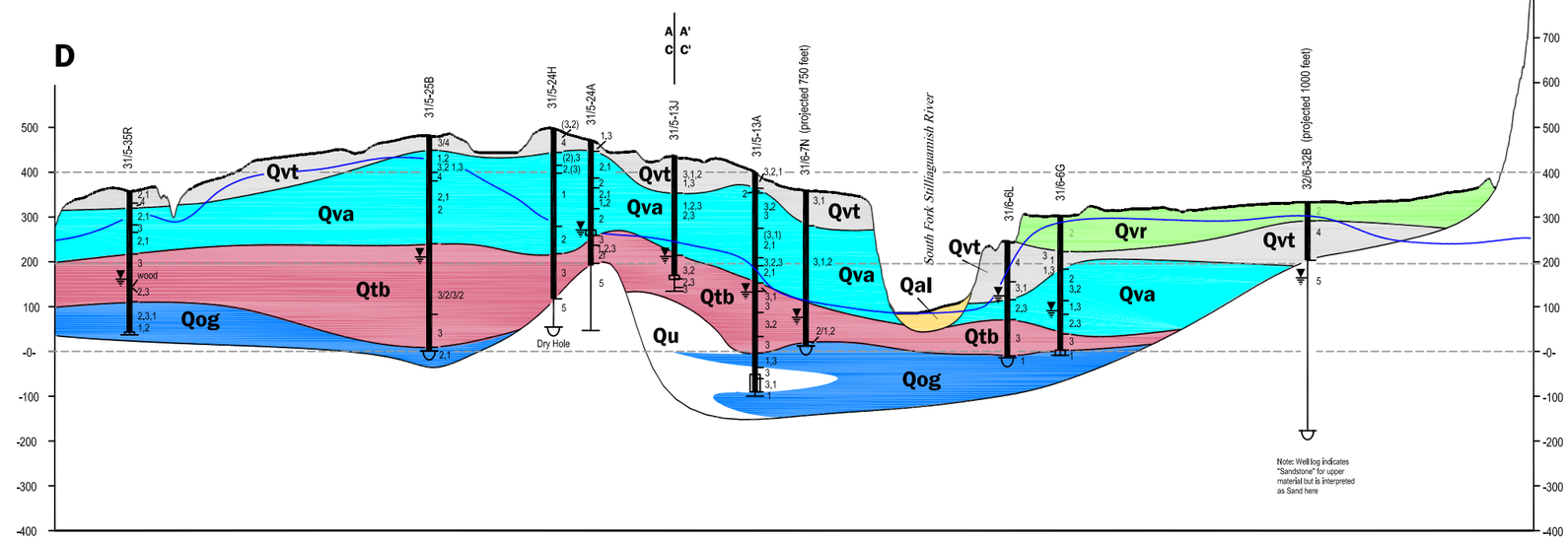
0 100 200 400
Vertical Scale in Feet
Vertical Exaggeration is 15 times
Vertical Datum = NAVD 88

FIGURE 5
HYDROGEOLOGIC
CROSS-SECTIONS A-A' AND B-B'

PgG

CITY OF ARLINGTON





31/6-13M
Township/Range-Section
(letter designates 1/4-1/4 section)

1 Gravel
2 Sand
3 Silt/Clay
4 Till (Hardpan)
5 Bedrock
2,1 Sand and Gravel
1,3 Silty Gravel
Water Level
Casing
Open Hole
Screen
Open Bottom

LEGEND

Qal River Alluvium
Qvr Vashon Recessional Outwash
Qvt Vashon Till
Qva Vashon Advance Outwash
Qtb Transitional Beds
Qog Older Gravel
Qu Quaternary Undifferentiated
Br Bedrock

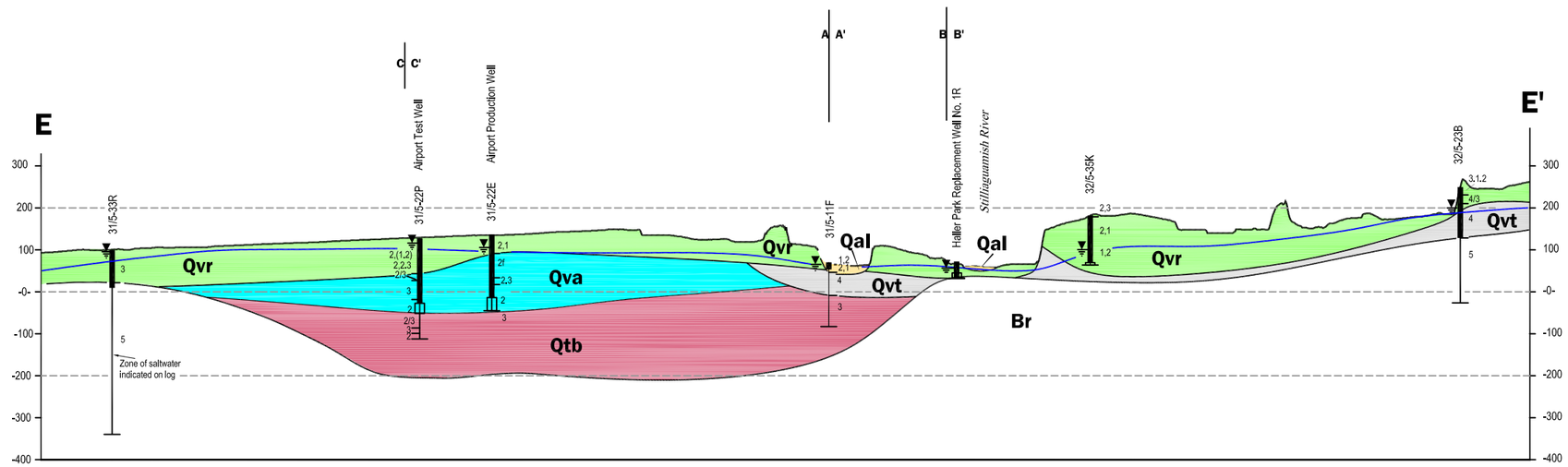
0 2500 5000 10,000
Horizontal Scale in Feet

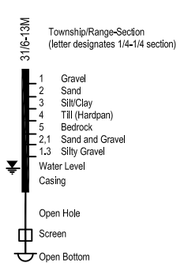
0 100 200 400
Vertical Scale in Feet
Vertical Exaggeration is 15 times
Vertical Datum = NAVD 88

FIGURE 6
HYDROGEOLOGIC
CROSS-SECTIONS C-C' AND D-D'

PgG

CITY OF ARLINGTON





LEGEND

Qal	River Alluvium
Qvr	Vashon Recessional Outwash
Qvt	Vashon Till
Qva	Vashon Advance Outwash
Qtb	Transitional Beds
Qog	Older Gravel
Qu	Quaternary Undifferentiated
Br	Bedrock

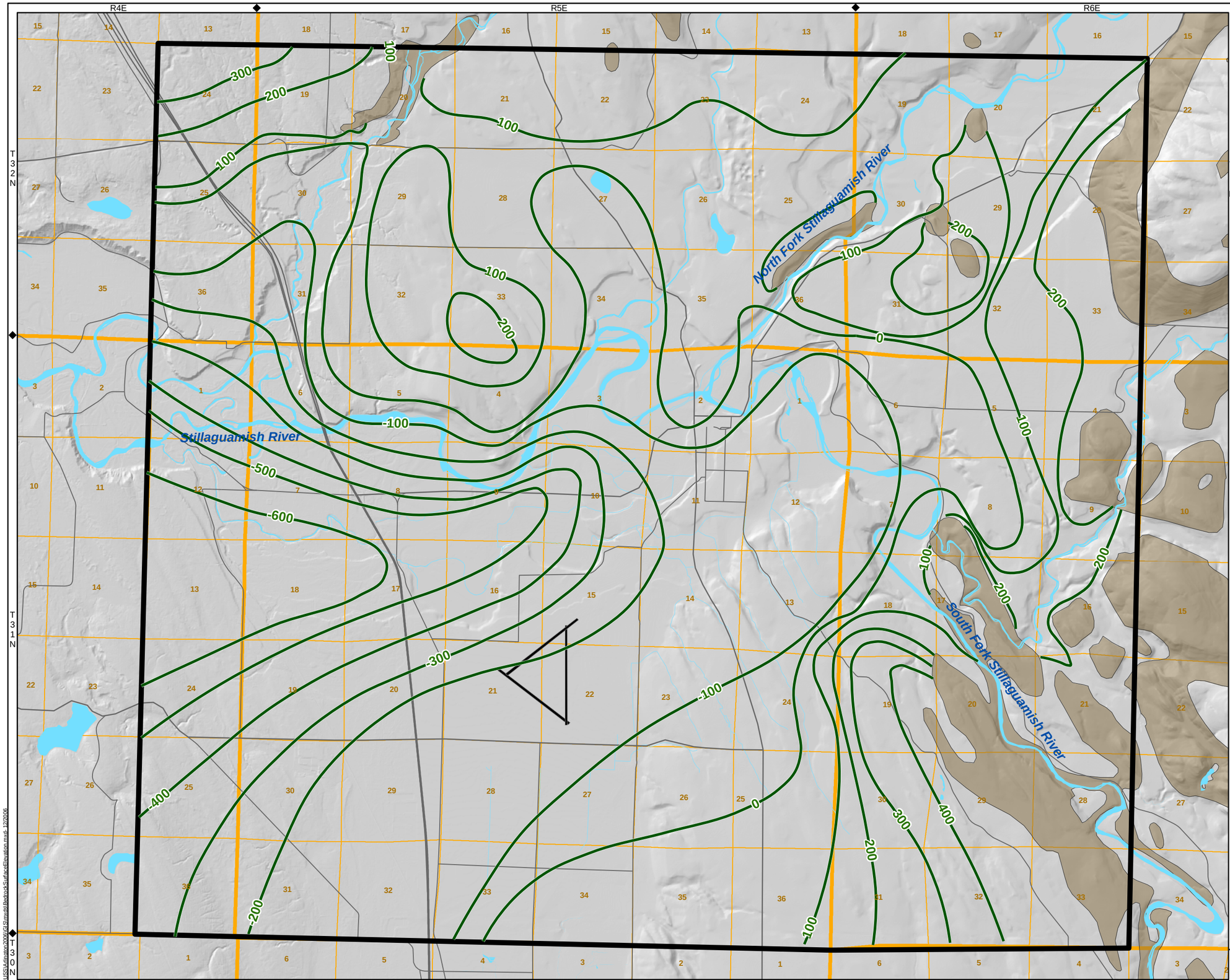
0 2500 5000 10,000
Horizontal Scale in Feet

0 100 200 400
Vertical Scale in Feet
Vertical Exaggeration is 15 times
Vertical Datum = NAVD 88

FIGURE 7
HYDROGEOLOGIC
CROSS-SECTION E-E'

PgG

CITY OF ARLINGTON



Legend

- Buried Bedrock Contours*
- Exposed Bedrock
- Groudwater Study Area
- Rivers
- Water Bodies
- City of Arlington

*Elevations in feet (NAVD 88)

N

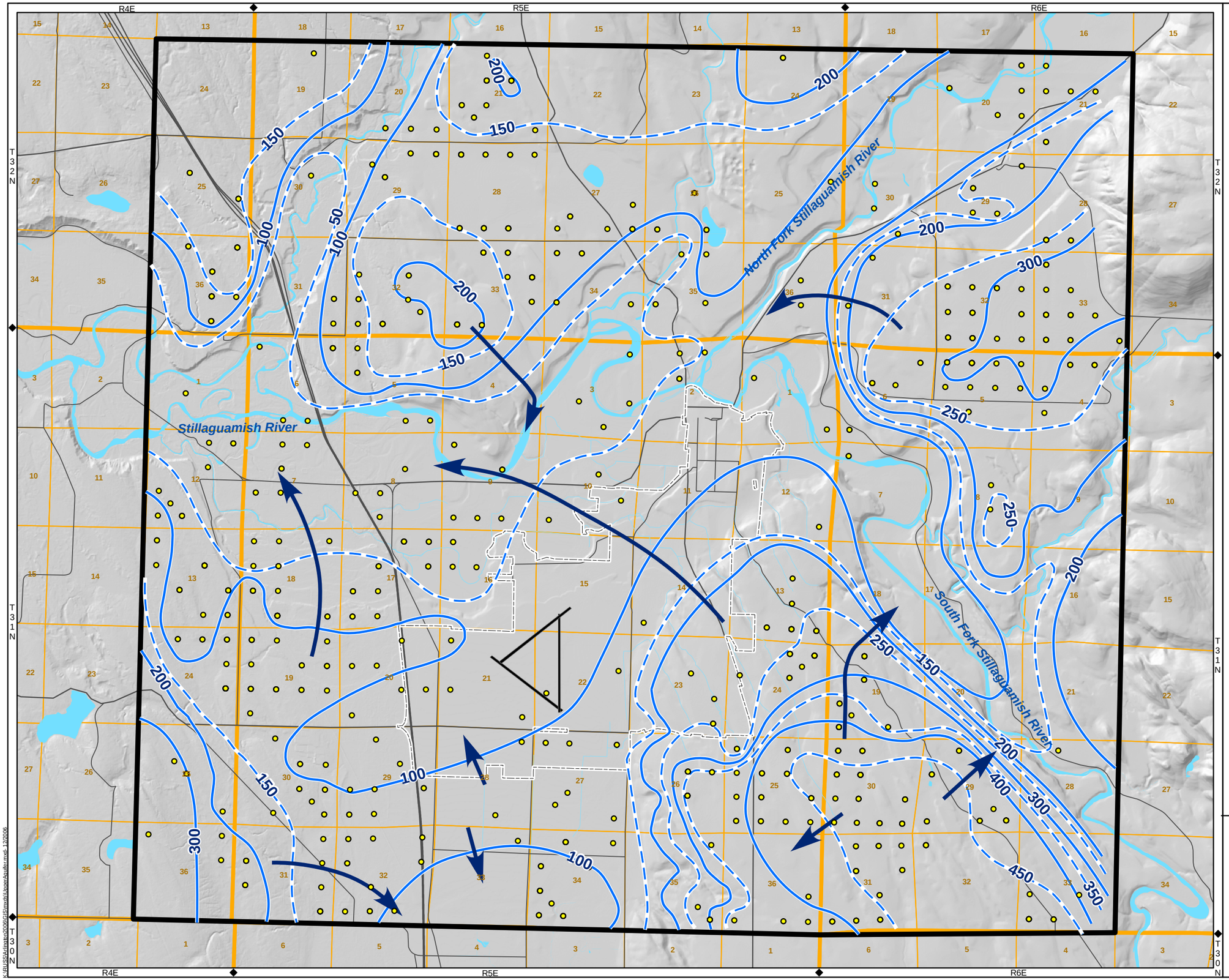
0 Feet 5,000

FIGURE 8

BEDROCK SURFACE ELEVATION

CITY OF ARLINGTON

PgG



Legend

Water Level Contour*

- 100-ft Interval
- 50-ft Interval (Where needed)
- Flow Direction
- Well Logs Used in Interpretation
- Groudwater Study Area
- Water Bodies
- Rivers

*Elevations in feet (NAVD 88)

0 Feet 5,000

N

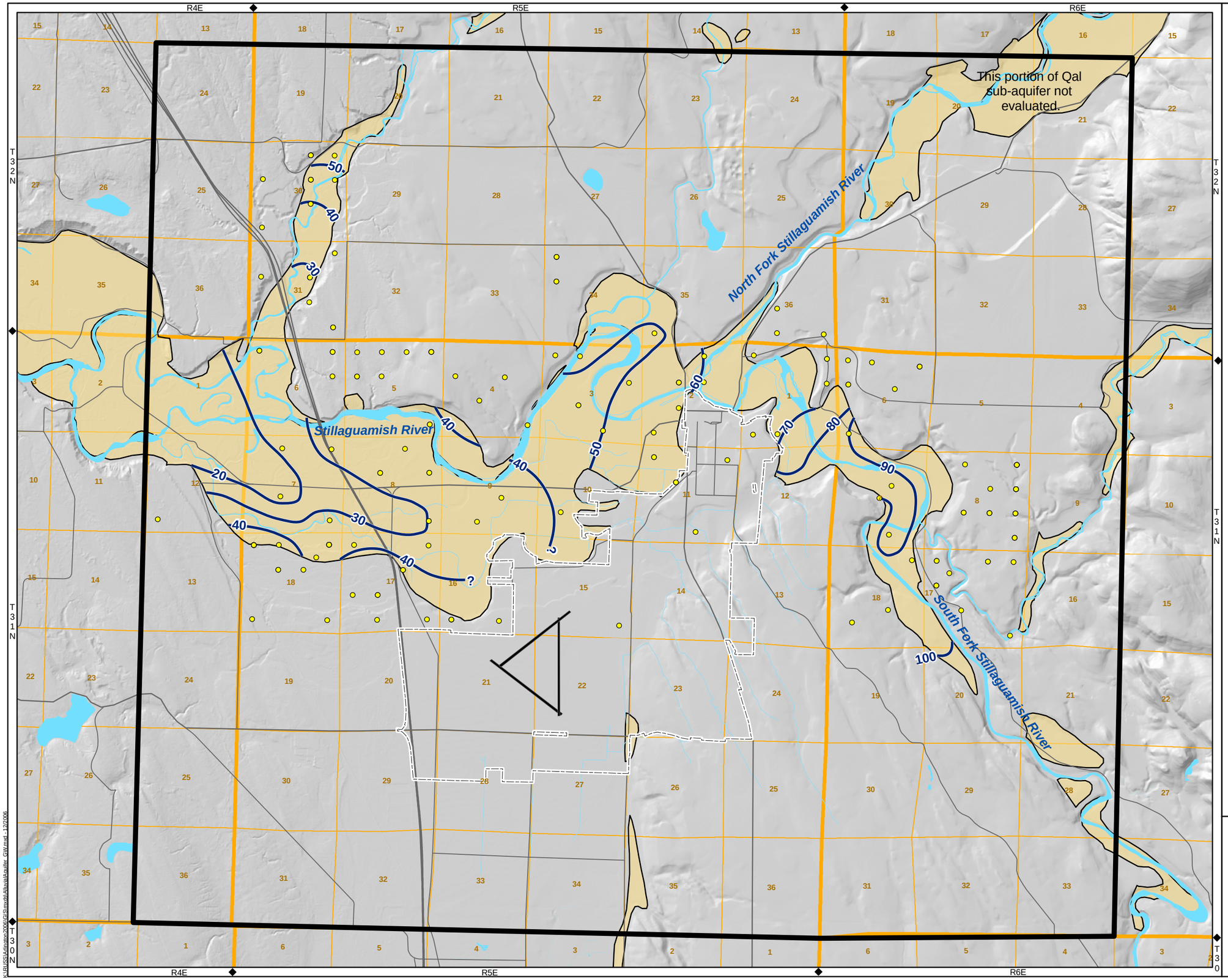
FIGURE 9

UPPER AQUIFER GROUNDWATER ELEVATIONS

CITY OF ARLINGTON

PgG

K:\RL\SOA\Arlington\2006\GIS\Smoke\UpperAquifer.mxd, 1/2/2006



Legend

- 10-ft Water Level Contour*
- Well Logs Used in Interpretation
- Groudwater Study Area
- Exposed River Alluvium
- Rivers
- Water Bodies

*Elevations in feet (NAVD 88)

0 Feet 5,000

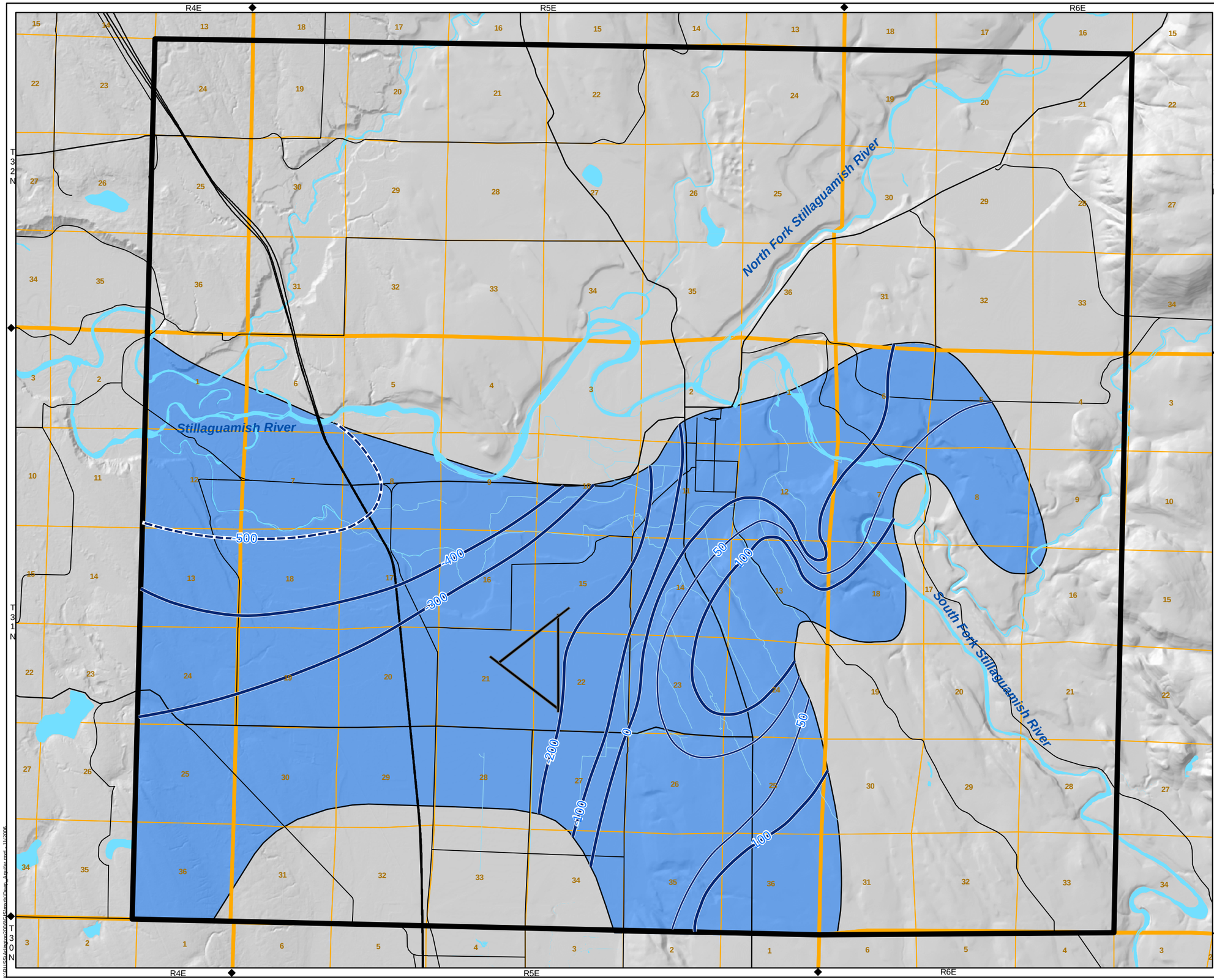
N

FIGURE 10

ALLUVIAL AQUIFER GROUNDWATER ELEVATIONS

CITY OF ARLINGTON

PgG



Legend

Groudwater Study Area

Top of Deep Aquifer Elevation Contour*

100-ft Contour

50-ft Contour
Dashed Where Infered

Deep Aquifer Extent in Groundwater Study Area

Water Bodies

Rivers

*Elevations in feet (NAVD 88)

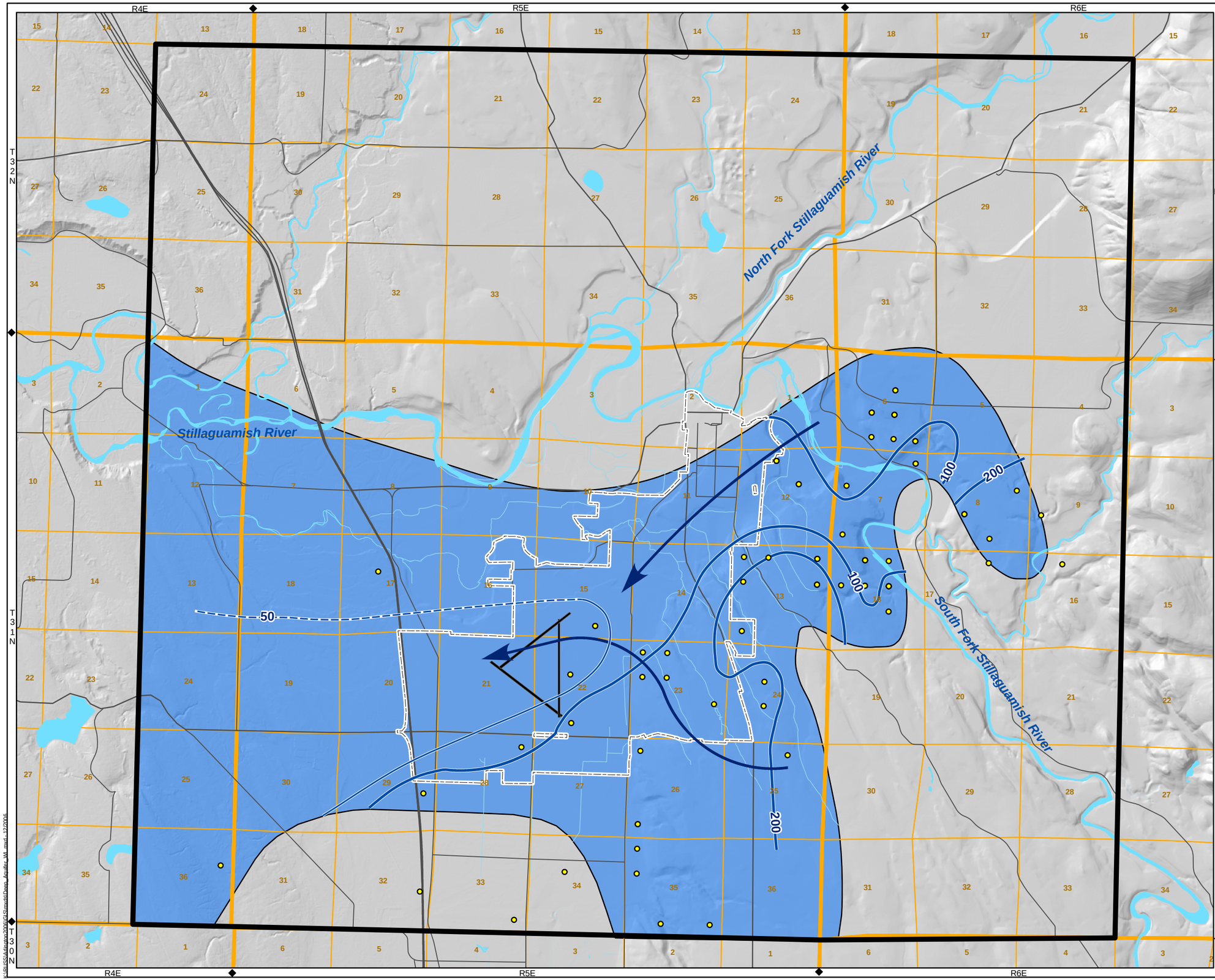
0 Feet 5,000

N

FIGURE 11
OCCURRENCE OF DEEP AQUIFER

CITY OF ARLINGTON

PgG



Legend

- Well Logs Used in Interpretation

Deep Aquifer Water Level Contour*

- 100-ft Contour
- 50-ft Contour (dashed where infered)
- Groundwater Flow Direction
- Deep Aquifer Extent in Groundwater Study Area
- Rivers
- Water Bodies
- Groudwater Study Area

*Elevations in feet (NAVD 88)

0 Feet 5,000

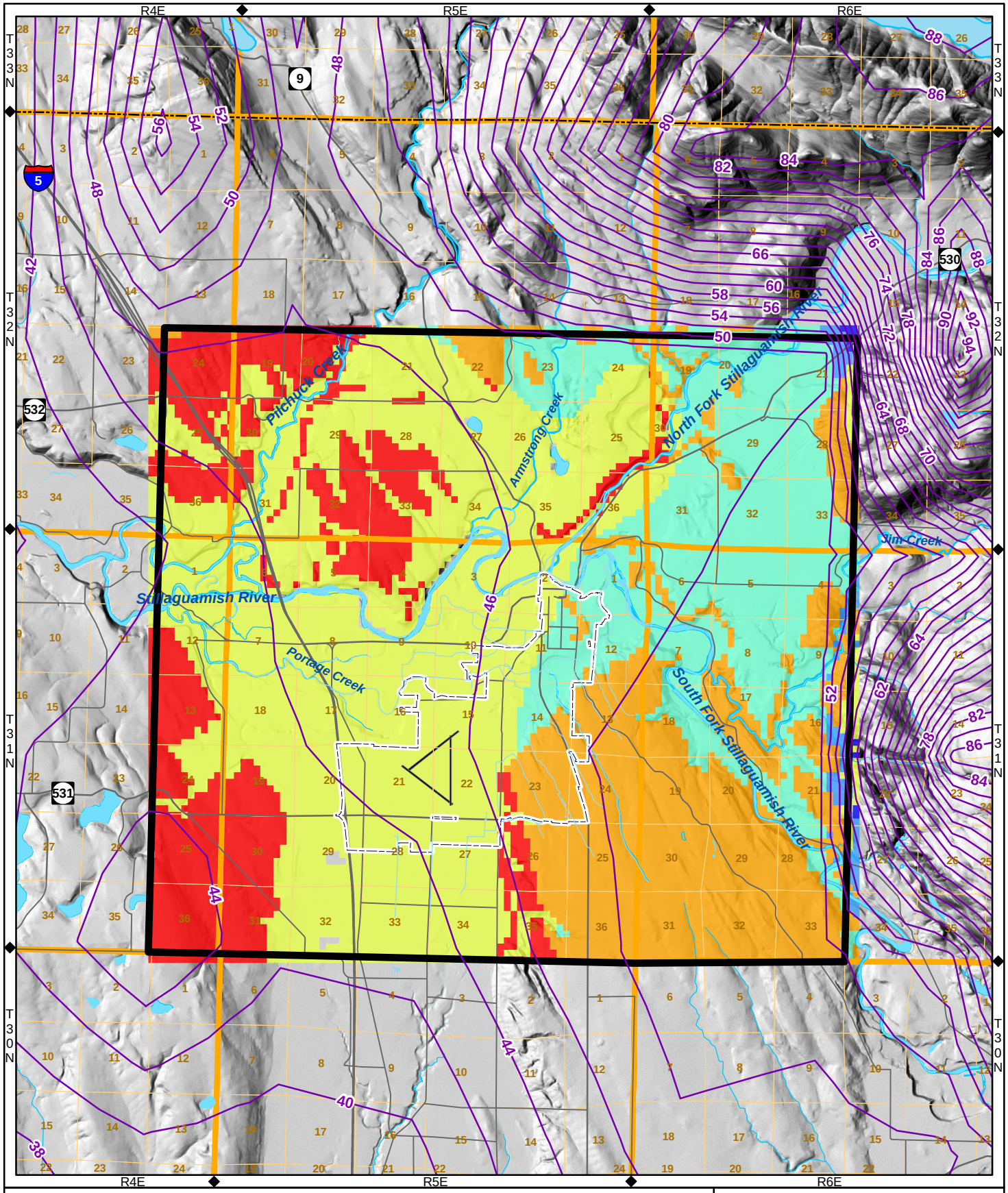
N

FIGURE 12

DEEP AQUIFER GROUND-WATER ELEVATIONS

CITY OF ARLINGTON

PgG



Groundwater Recharge (inches per year)

- < 20
- 20 - 25
- 25 - 30
- 30 - 35
- 35 - 40
- > 40

Annual Precipitation (Inches)

Study Area

Outwash relation:
R= (0.9)P - 12

Till relation:
R=(0.56)P - 6.33

N

0 Feet 10,000

FIGURE 13
GROUNDWATER RECHARGE

JP0604

PgG

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