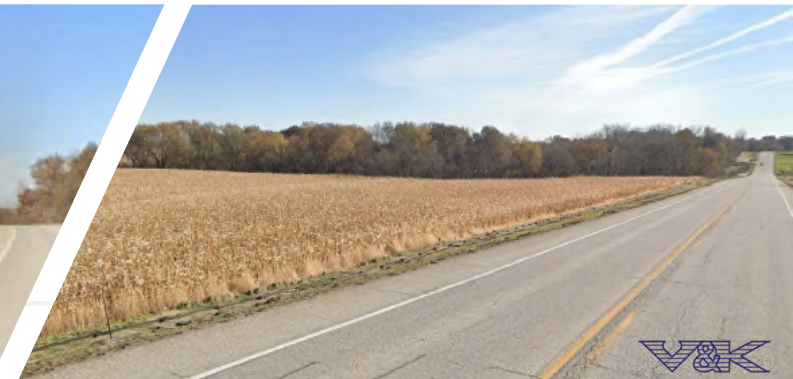




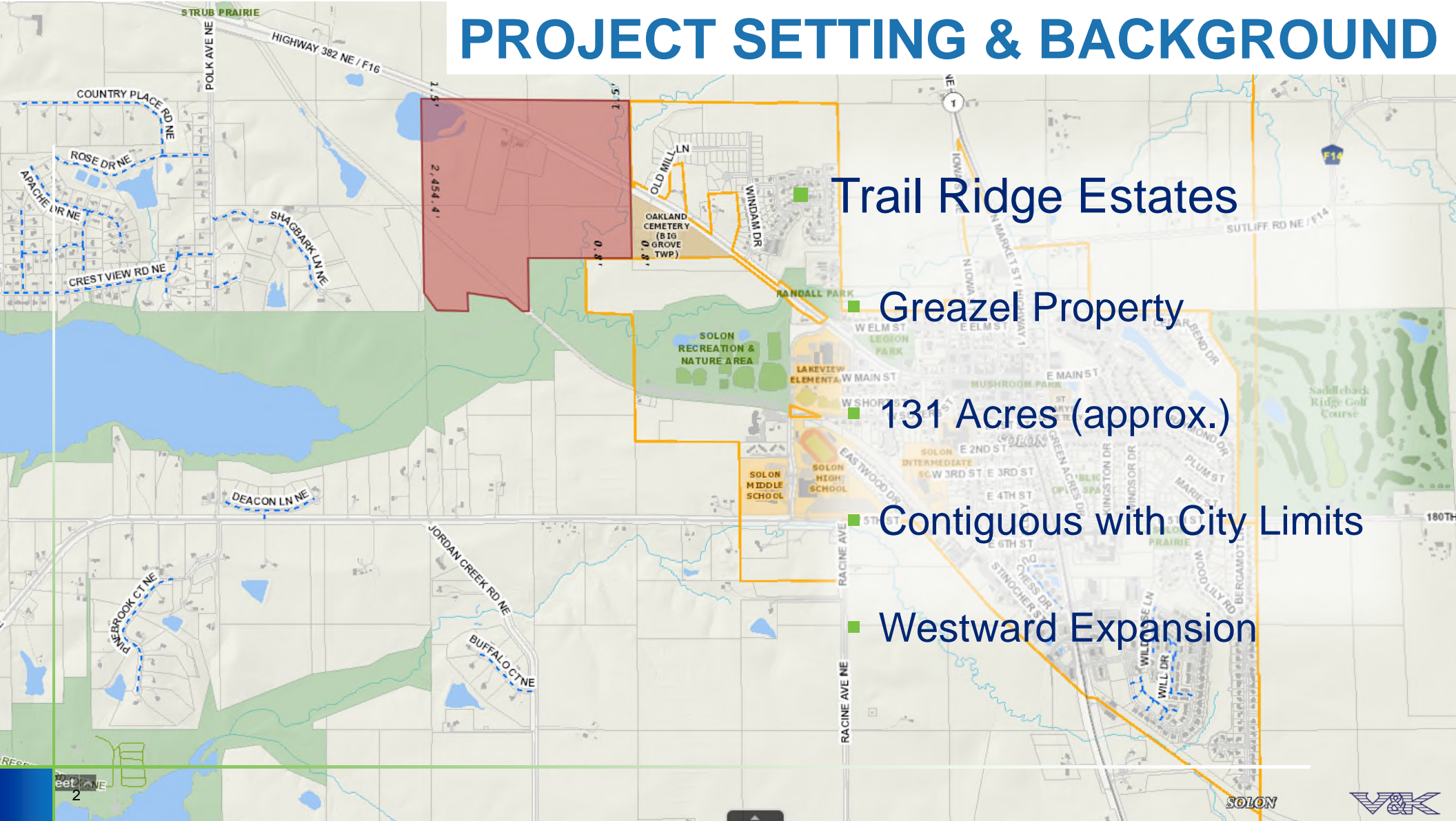
2/10/2021 TRAIL RIDGE ESTATES DEVELOPMENT CONCEPT PLAN, REZONING, AND ANNEXATION SOLON, IOWA

Dave Schechinger, Veenstra & Kimm
Cami Rasmussen, City of Solon
Scott Kleppe, City of Solon
Kevin Olson, City of Solon

Adam Hahn, Watts Development
Gary Watts, Watts Development
Brian Boelk, Axiom Consultants



PROJECT SETTING & BACKGROUND



■ Trail Ridge Estates

■ Greazel Property

■ 131 Acres (approx.)

■ Contiguous with City Limits

■ Westward Expansion

SOLON



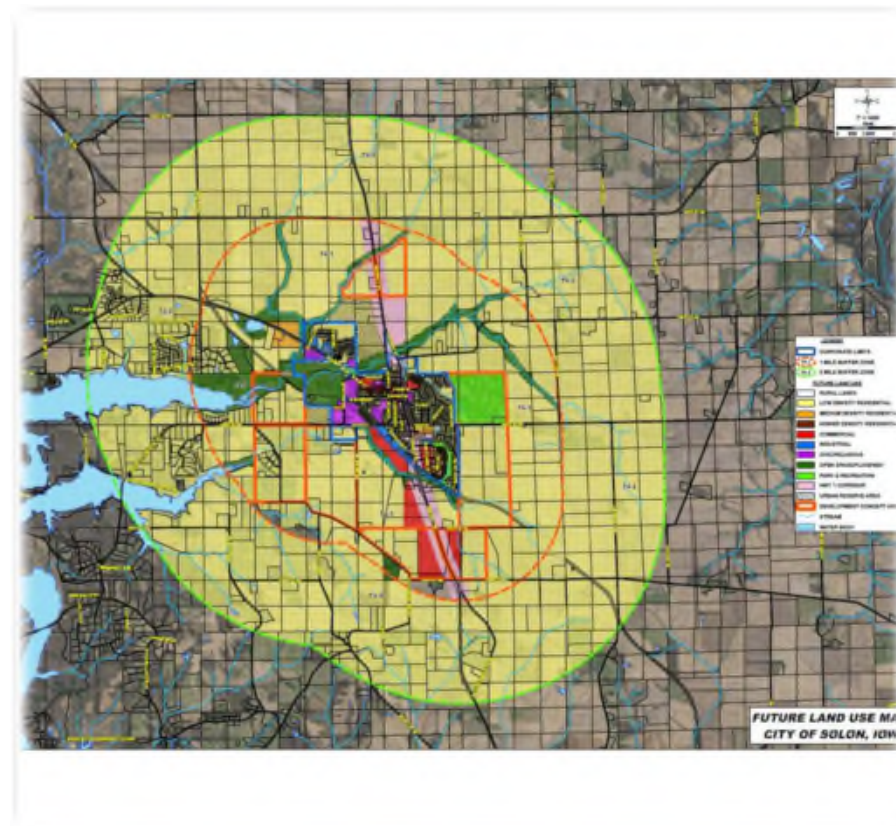
Review of Proposed Development Concept

- Review Comprehensive Plan
- Compare Concept to Comp Plan Goals
 - *Sustainable Growth*
 - *Encourage housing for all ages and family types*
 - *Preserve streams, floodplains & wetlands*
 - *Dedicate land for public parks w/ equipment*
 - *Accessibility with sidewalks and trails*
 - *Connectivity of recreational facilities/trails*
 - *Protect and enhance park and recreation*
 - *High quality services, utilities & facilities*
 - *Ensure adequate facilities to serve developments*



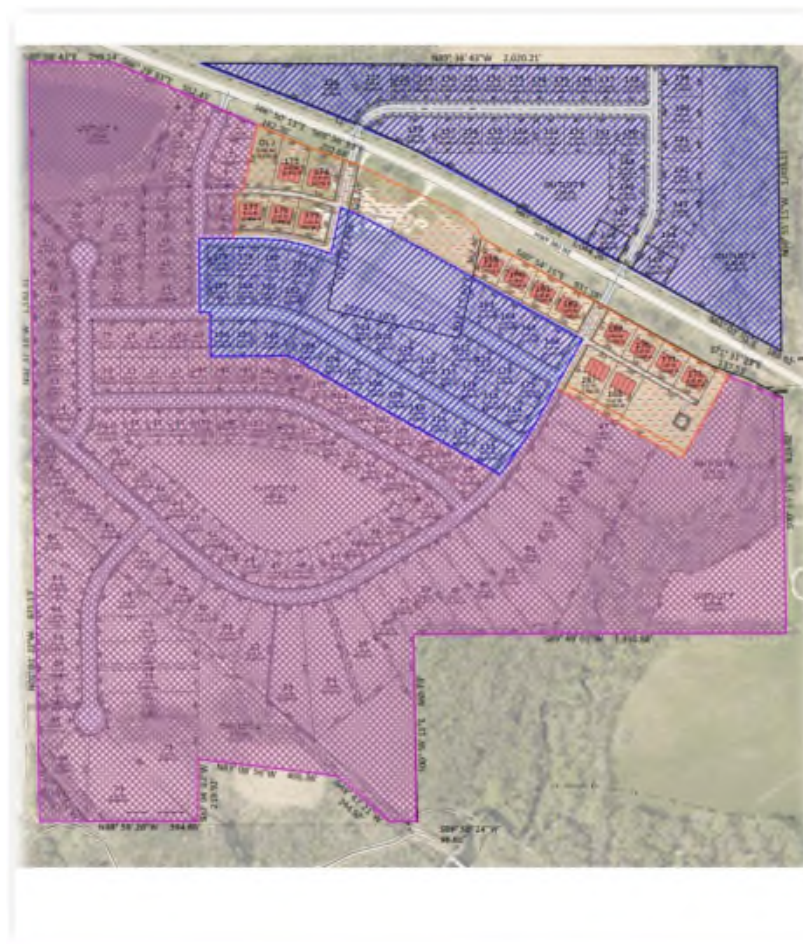
Review of Future Land Use Plan

- Growth Management Goals
 - *Encourage contiguous land development*
 - *Maximize Infrastructure efficiency*
 - *Fit character of the City of Solon*
 - *Compatible with Fringe Area Agreement*
- Land Use Categories
 - *Rural Lands; preserve natural features*
 - *Low Density Residential (1-4 units/Ac); predominately single-family detached*
 - *Medium Density Residential (2-4 units/Ac and not more than 8 units/Ac); single family attached, townhouses, etc.*
 - *Open Space/Floodway; preserve natural features and flood mitigation*



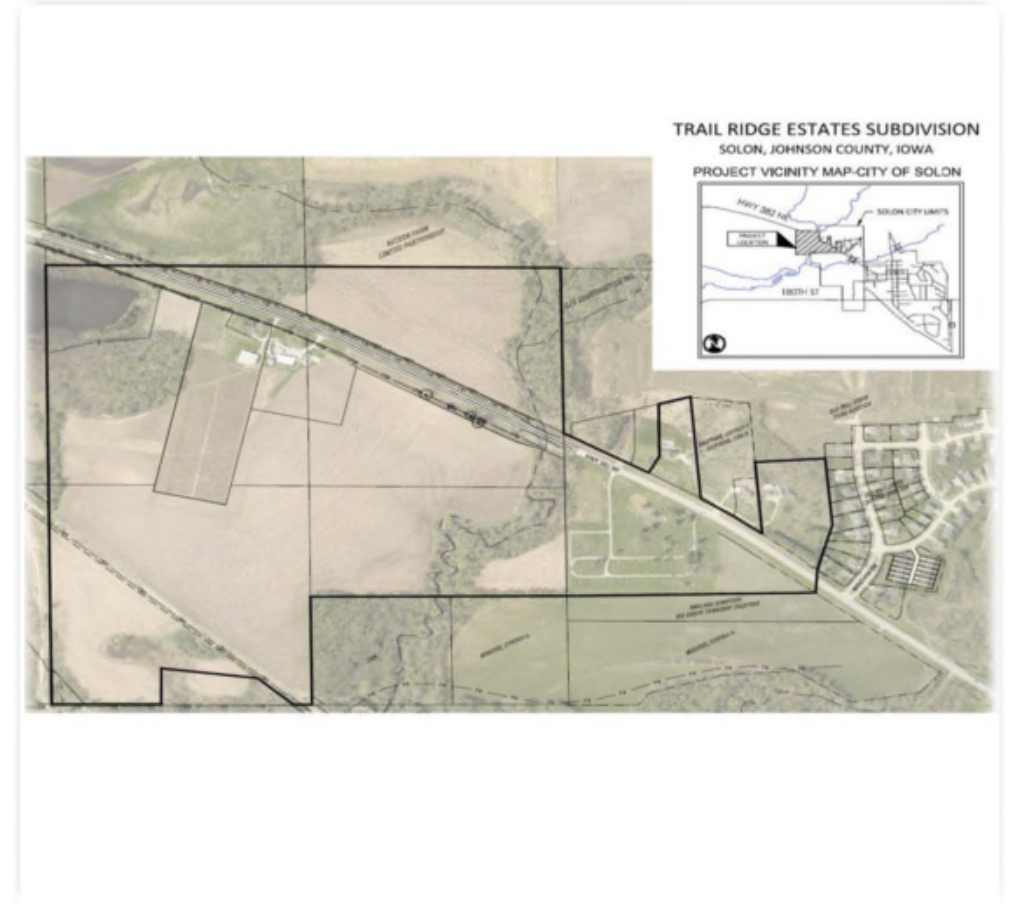
Review of Proposed Zoning

- R-1 Residential District
 - *Single Family Detached*
 - *South of Hwy 382*
 - *84 Acres proposed*
- R-3 Residential District
 - *Single Family / Multi Family*
 - *South of Hwy 382*
 - *13 Acres proposed*
- R-4 Residential District
 - *Single Family Attached (Common Wall)*
 - *Lot is split into two separate parcels*
 - *North & South of Hwy 382*
 - *37 Acres proposed*



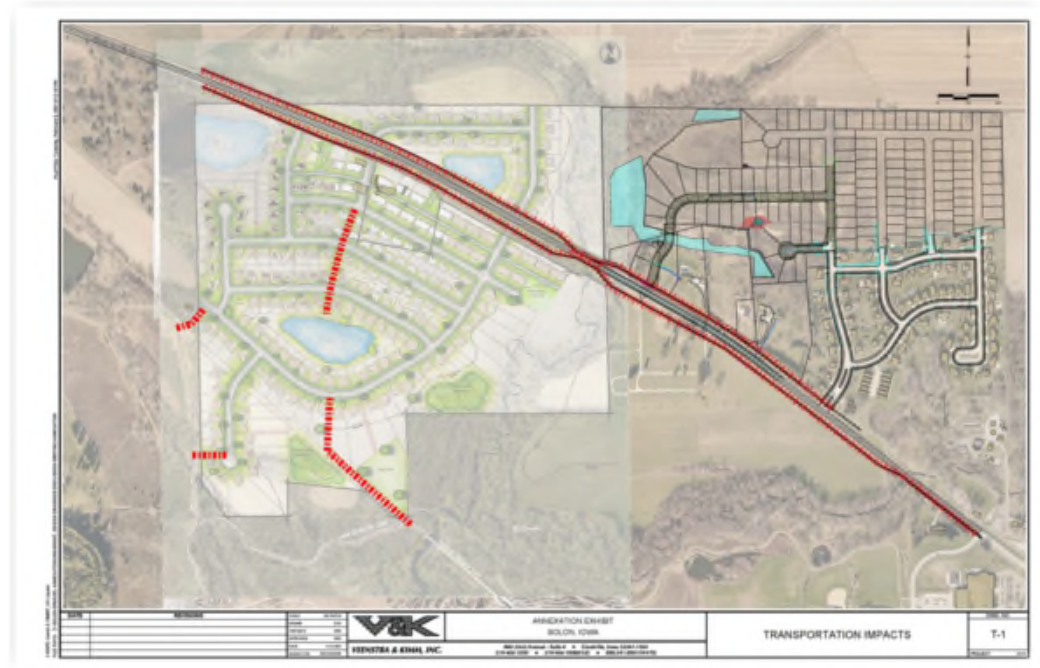
Review of Proposed Annexation

- Contiguous to City Limits
 - *Abuts Old Mill Creek north of Hwy 382*
 - *Abuts Menefee south of Cemetery*
- Voluntary Annexation
 - *Exceeds area required for 80/20*
 - *City working with affected properties*
- Affected Properties
 - *Bennett*
 - *Geistkemper*
 - *Big Grove Township (Cemetery Trustees)*
 - *Johnson County (Hwy 382 ROW)*
 - *Greazel*



Review of Transportation Impacts

- Traffic Considerations
 - *Access points into development*
 - *Speed limit inside City limits*
 - *Increase in traffic volume on Hwy 382*
 - *Increased traffic on existing City streets*
- Pedestrian Accommodations
 - *Connections to Johnson County trail*
 - *Sidewalks/Trail along Hwy 382*
 - *Sidewalks and Trails within development*



Review of City Service Impacts

- **Water Supply**
 - Existing water supply can support initial phases
 - Additional supply required to support growth
- **Water Storage**
 - Existing water storage can support development
- **Water Distribution**
 - Existing water main on 382 will need to be negotiated with GAW
 - Loop main in south to provide fire protection
- **Wastewater**
 - Existing treatment facility can support initial phases
 - Additional capacity required to support growth; existing facility is aging and in need of improvements to meet future limits.
- **Schools/Emergency Services/Public Services**
 - Growth in any part of the community will increase demands on these services.

Capacity Analysis for Water & Sewer
City of Solon, Iowa
February, 2021

Solon WWTP		Pop. Eq.	Notes
WWTP can serve a population equivalent of		3,600	#/day BOD
Current loading		2,935	
Remaining Capacity		665	
Proposed Development (Trail Ridge)		1,232	

Solon Water Supply		GPM	GPD	Pop. Eq.	Notes
Well Capacity (largest well out of service)	500	720,000	4,000	180 gpcd peak	
Current Peak Day		528,300	2,935		
Residential Growth; assume 85 people per year		630 gpd/unit	3.5	per SF Unit	
Remaining Capacity		191,700	1,065		
Proposed Development (Trail Ridge)			1,232	3.5/unit	

Solon Water Storage		Gallons	MG	Pop. Eq.	Notes
Current Storage Volume	600,000		0.60	6,000	100 gpcd Avg.
Current Storage Requirement (Avg Day)	293,500			2,935	
Residential Growth; assume 85 people per year		350 gpd/unit		3.5	per SF Unit
Remaining Capacity	306,500		0.31	3,065	
Proposed Development (Trail Ridge)				1,232	