

(f) Irrigation design group description(s) including applicable soils, intake rates and water holding capacities

IRRIGATION DESIGN GROUP 1

INTAKE FAMILY 0.1

The soils in this design group are divided into three subgroups according to their available water capacity. Subgroup A mainly includes deep, fine- textured soils on bottomland. Subgroup B mainly includes deep, fine-textured soils on uplands and stream terraces. Subgroup C includes moderately deep, fine-textured soils on uplands.

SUBGROUP 1-A

Deep soils on bottomland with a clay, silty clay, or silty clay loam surface layer and slowly or very slowly permeable subsoil, underlain by clayey to sandy alluvium.

<u>Depth</u>	<u>Available Water Capacity</u>
1.0'	2.1"
2.0'	3.5"
3.0'	4.9"
4.0'	6.2"

Albaton Clay	Minatare Loam
Albaton Silty clay	Muscotah Silt clay loam
Albaton Silt clay loam	Napa Silt loam
Albaton Variant Clay	Nishna Silty clay
Baltic Silty clay	Onawa Clay ¹
Baltic Silt clay loam	Onawa Silty clay ¹
Blencoe Silty clay	Onawa Silt clay loam ¹
Blencoe Silt clay loam	Owego Silty clay
Blyburg Silty clay ¹	Percival Silty clay ¹
Chase Silt clay loam	Sarpy Silty clay ¹
Clamo Silty clay	Silver Creek Silt clay loam
Cooper Silt clay loam	Solomon Silty clay
Forney Silty clay	Wabash Silty clay
Haynie Silty clay	Wabash Silt clay loam
Holly Springs Silt clay loam	Woodbury Silty clay
Lohmiller Silty clay	Zoe Silt clay loam
Luton Silty clay	Zook Silty clay
Luton Silt clay loam	Zook Silt clay loam

¹ Blyburg and Onawa soils have moderate permeability in subsoil. Percival and Sarpy soils have rapid permeability in subsoil.

SUBGROUP 1-B

Deep soils on uplands and stream terraces with a clay, silty clay, clay loam, or silty clay loam surface layer and a slowly permeable subsoil.

<u>Depth</u>	<u>Available Water Capacity</u>
1.0'	1.9"
2.0'	3.2"
3.0'	4.5"
4.0'	5.7"

Bahl Clay	Massie Clay
Buffington Silty clay	Mayberry Silt clay loam
Butler Silt clay loam	Otoe Silt clay loam
Crete Silt clay loam	Pawnee Clay
Crete variant Silt clay loam	Pawnee Clay loam
Fillmore Silt clay loam	Pawnee variant Clay
Kyle Silty clay	Pawnee variant Clay loam
Longford Silt clay loam	Promise Silty clay
Malmo Clay	Verdel Silty clay
Malmo Clay loam	Verdel Silt clay loam
Malmo Silt clay loam	Wymore Silty clay
Mayberry Clay loam	Wymore Silt clay loam

SUBGROUP 1-C

Moderate1y deep soils with a clay, silty clay, clay loam or silty clay loam surface layer and a slowly permeable subsoil.

<u>Depth</u>	<u>Available Water Capacity</u>
1.0'	1.9"
2.0'	3.2"
3.0'	4.5"

Benfield Silt clay loam	Padonia Silt clay loam
Boyd Silty clay	Pierre Clay
Bristow Silty clay	Pierre Silty clay
Edalgo Silt clay loam	Sansarc Clay loam
Hisle Loam	Sansarc Silty clay
Hisle Silt loam	Wakeen Silt clay loam
Labu Silty clay	Wakeen variant Silt clay loam
Lynch Silty clay	