# AERIAL PHOTOS


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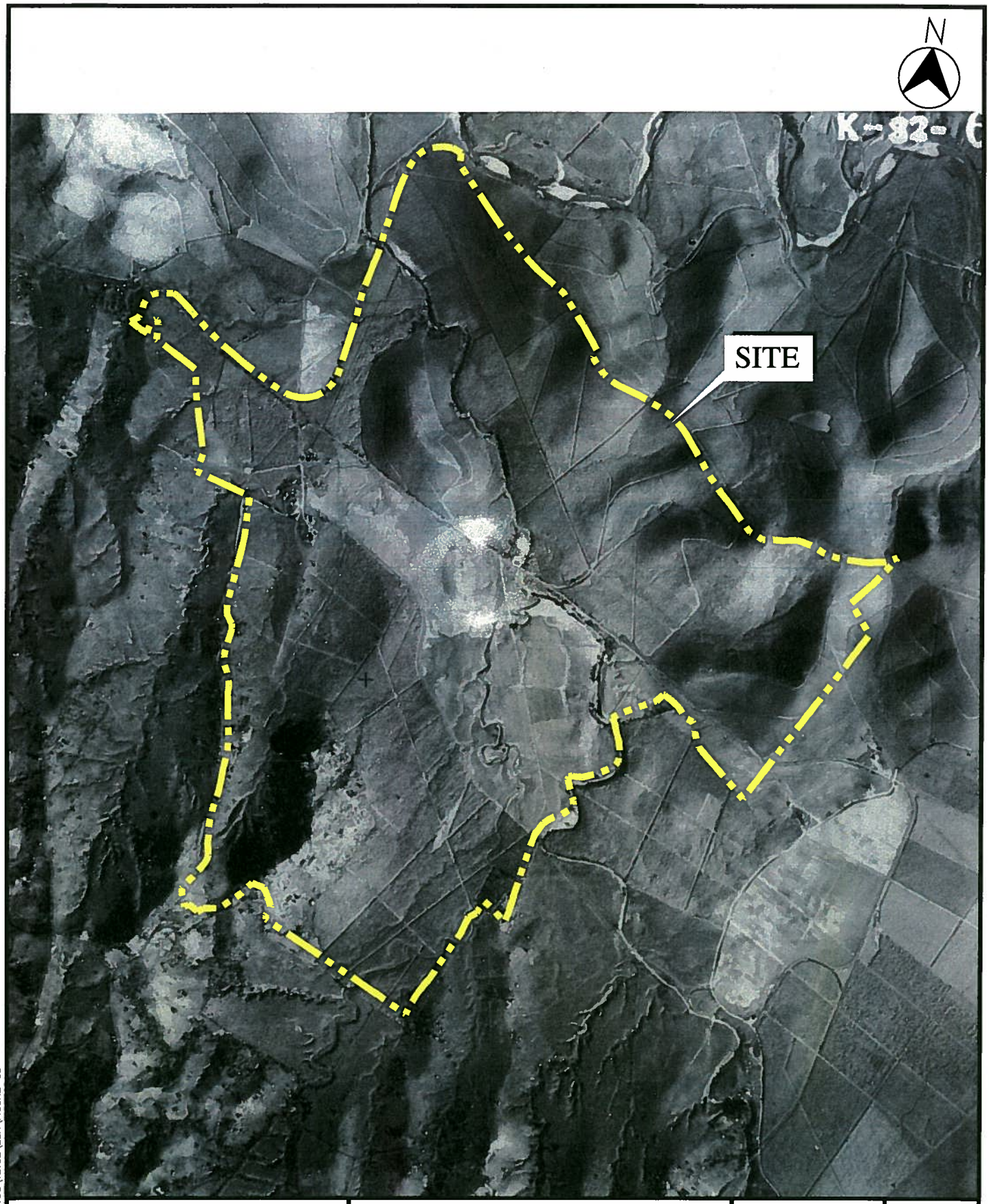


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1937 AERIAL PHOTO

NRG SOLAR JUNCOS LLC.
SOLAR PV GENERATING PLANT

JUNCOS, PUERTO RICO

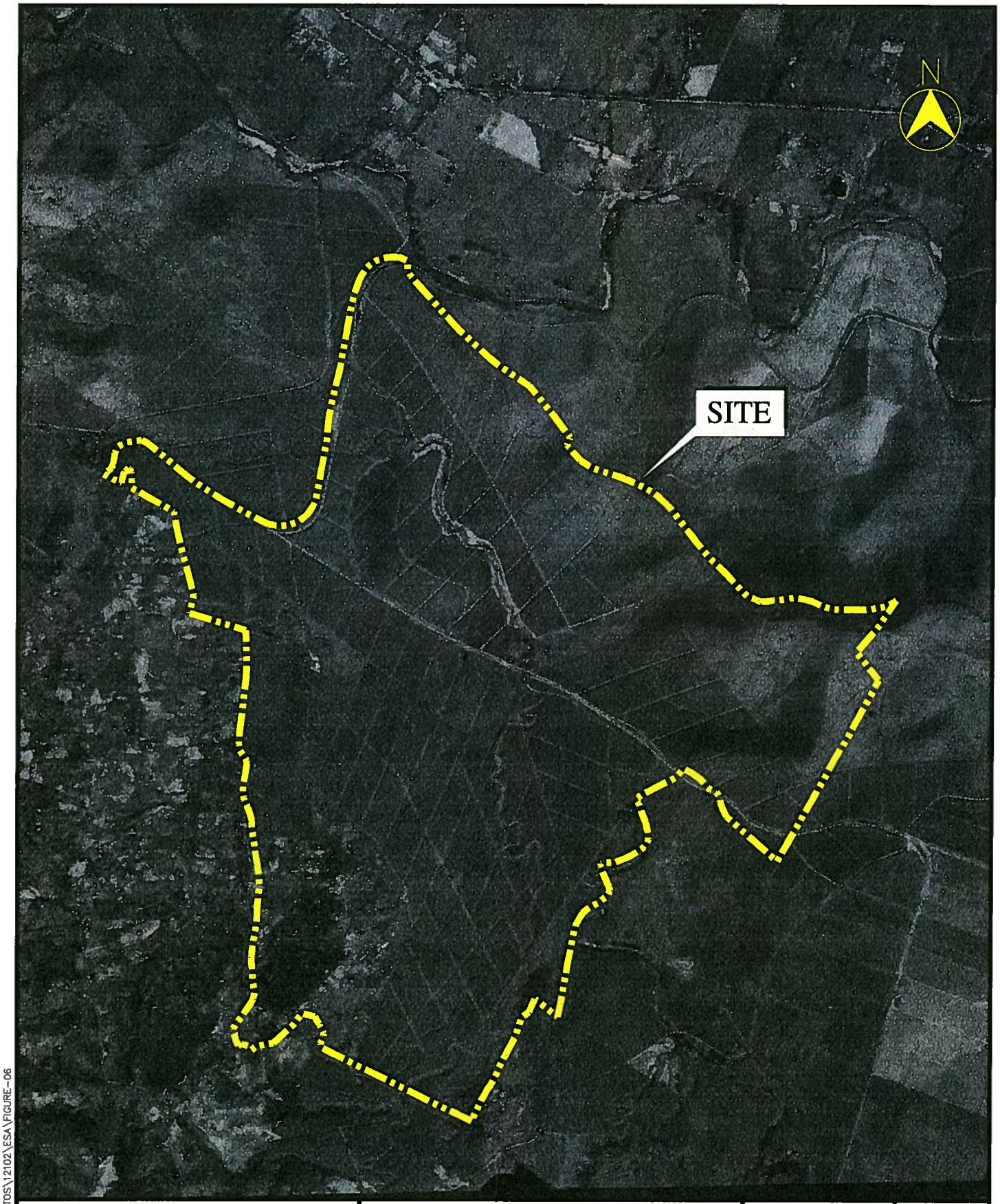
CMA# 12102

SCALE: 1: 15,000

DATE: 06/27/12

FIGURE 5

FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-05

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1951 AERIAL PHOTO

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FIGURE 6

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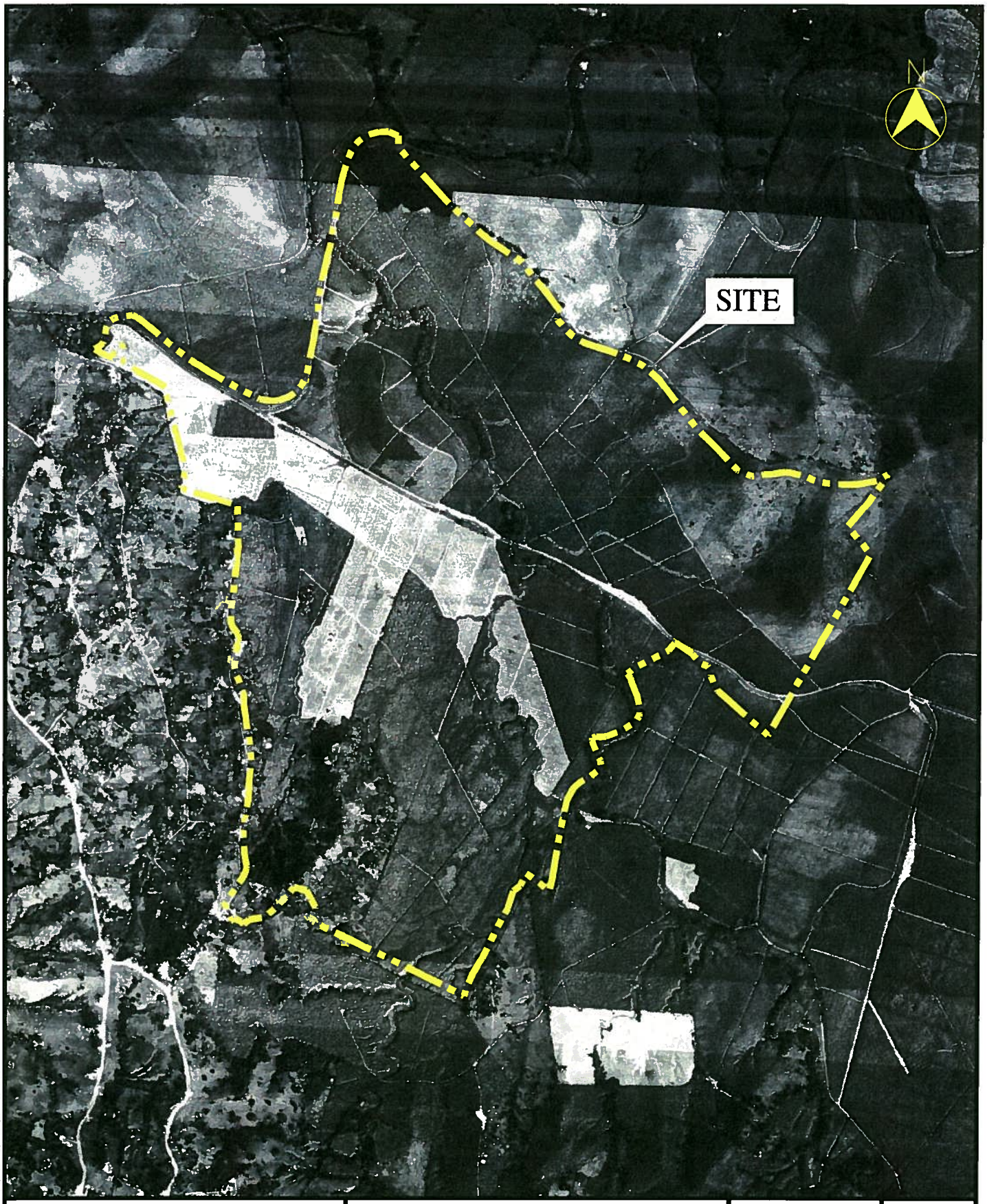


FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-07

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1965 AERIAL PHOTO

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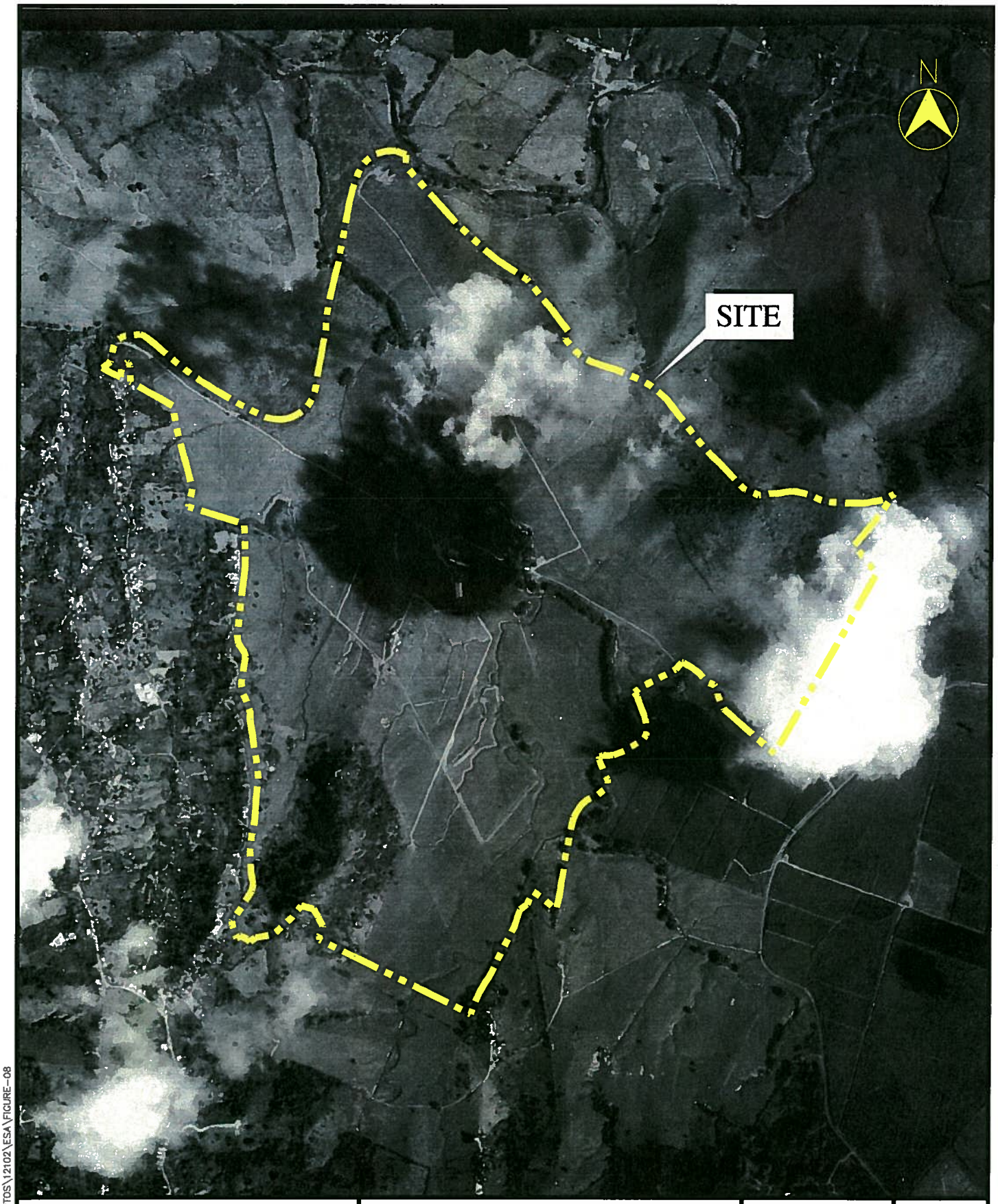
FIGURE 7

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1977 AERIAL PHOTO

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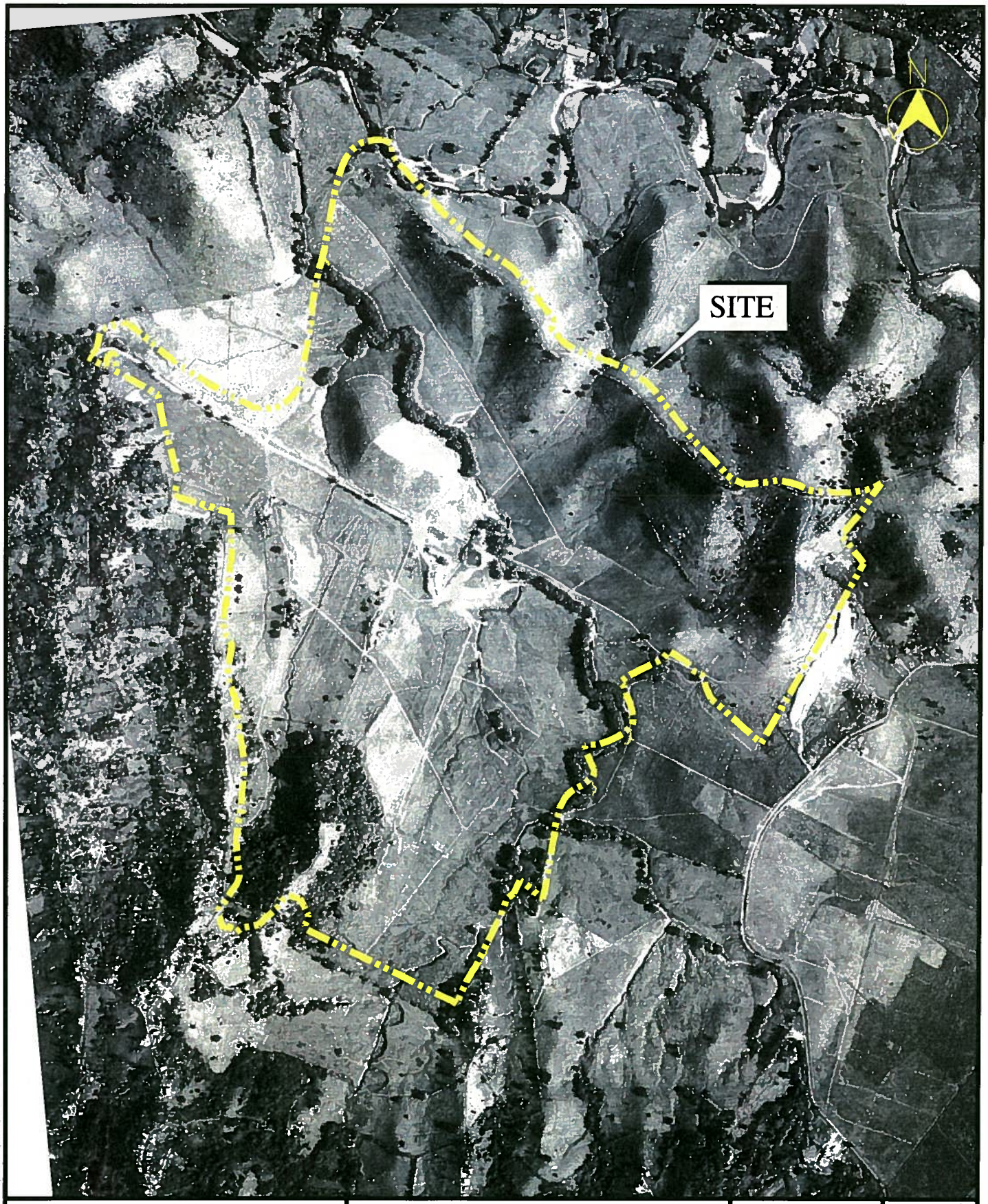
FIGURE 8

FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-08

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1988 AERIAL PHOTO

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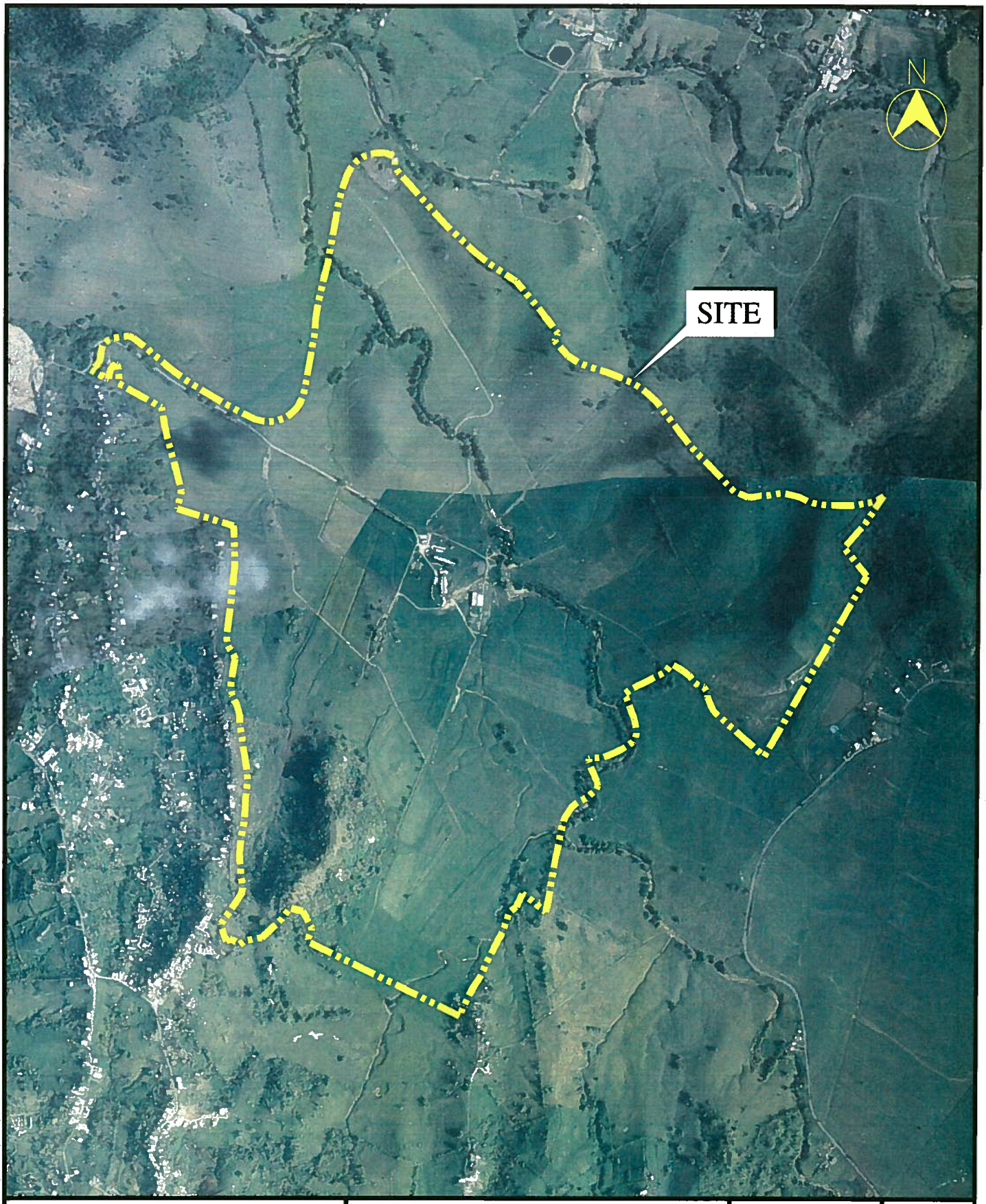
FIGURE 9

FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-09




FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-10

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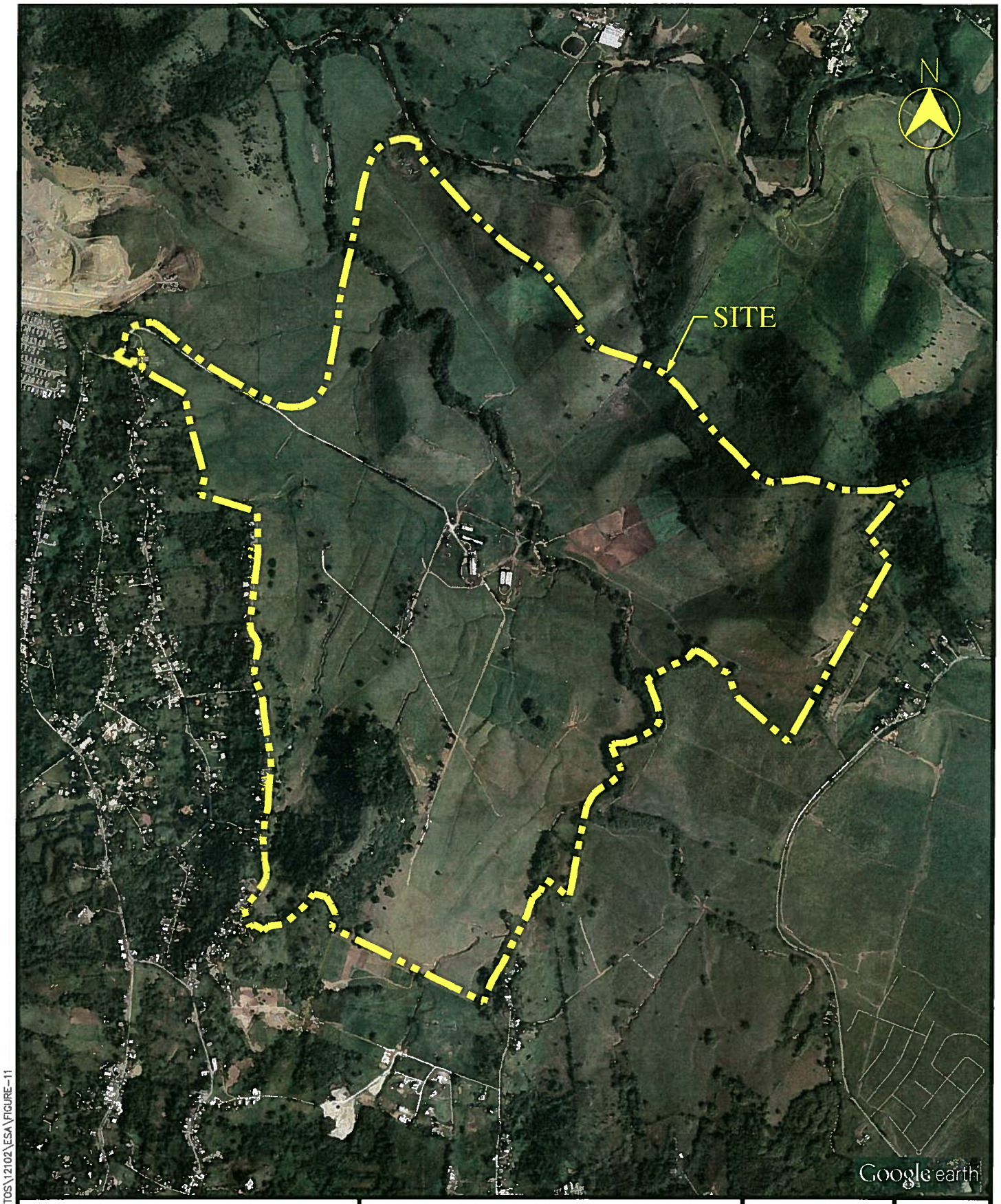
|---|---|---|
| 1999 AERIAL PHOTO | CMA# 12102 | FIGURE 10 |
| NRG SOLAR JUNCOS LLC.<br>SOLAR PV GENERATING PLANT | SCALE: 1: 15,000 | |
| JUNCOS, PUERTO RICO | DATE: 06/27/12 | |

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2004 AERIAL PHOTO

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FIGURE 11

FILE: M:\CIVIL\PROYECTOS\12102\ESA\FIGURE-11

## Preliminary Wetland and Streams Drawing Plans


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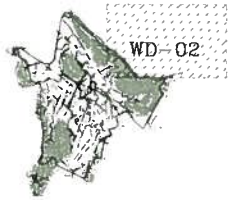
PRELIMINARY WETLAND & STREAMS PLAN
TITLE

WD-01
REVISION No. 0

DRAFT

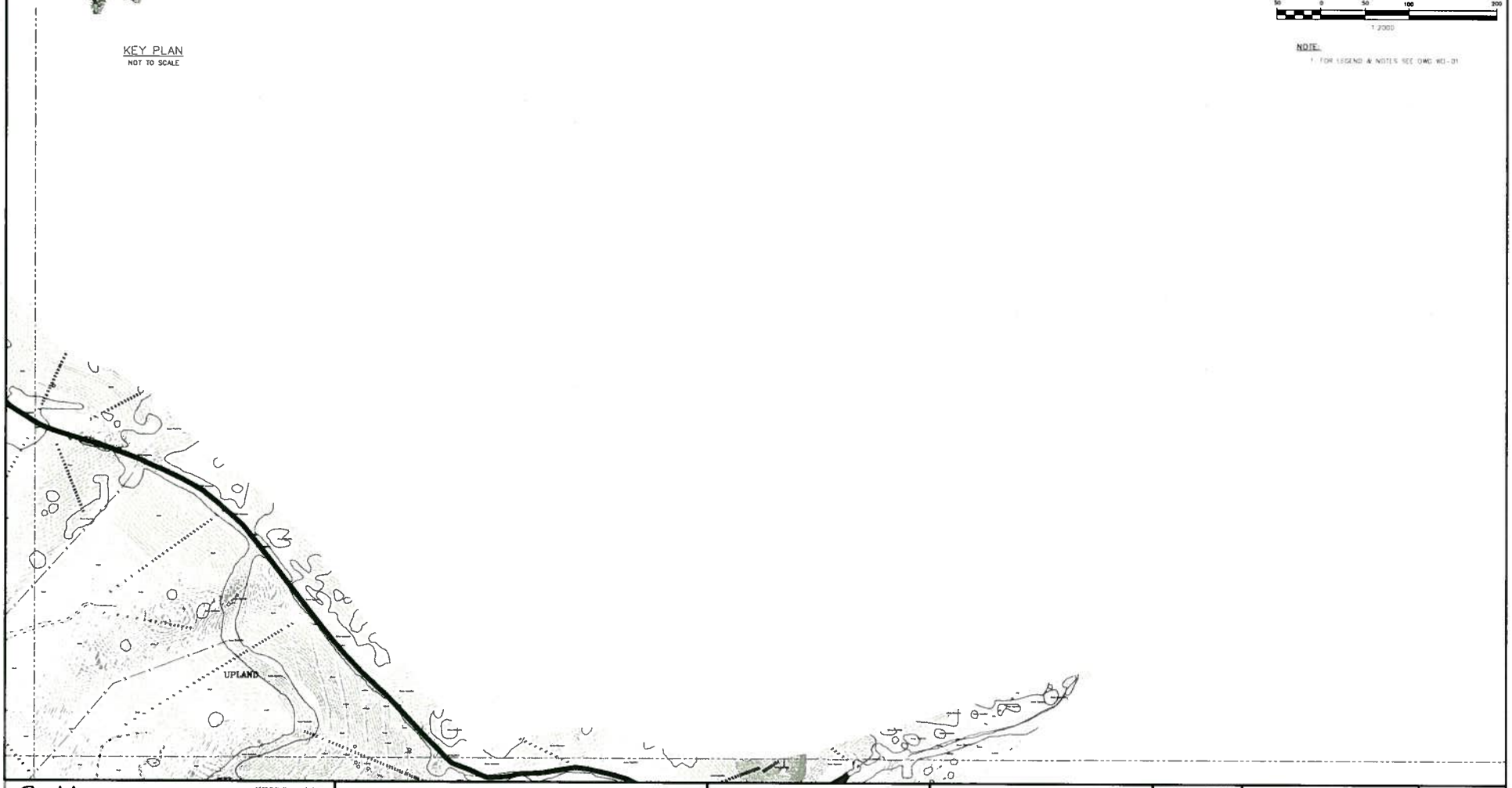



KEY PLAN
NOT TO SCALE

N

GRAPHIC SCALE
50 0 50 100 200
1:2000

NOTE:
1. FOR LEGEND & NOTES SEE DWG WD-01

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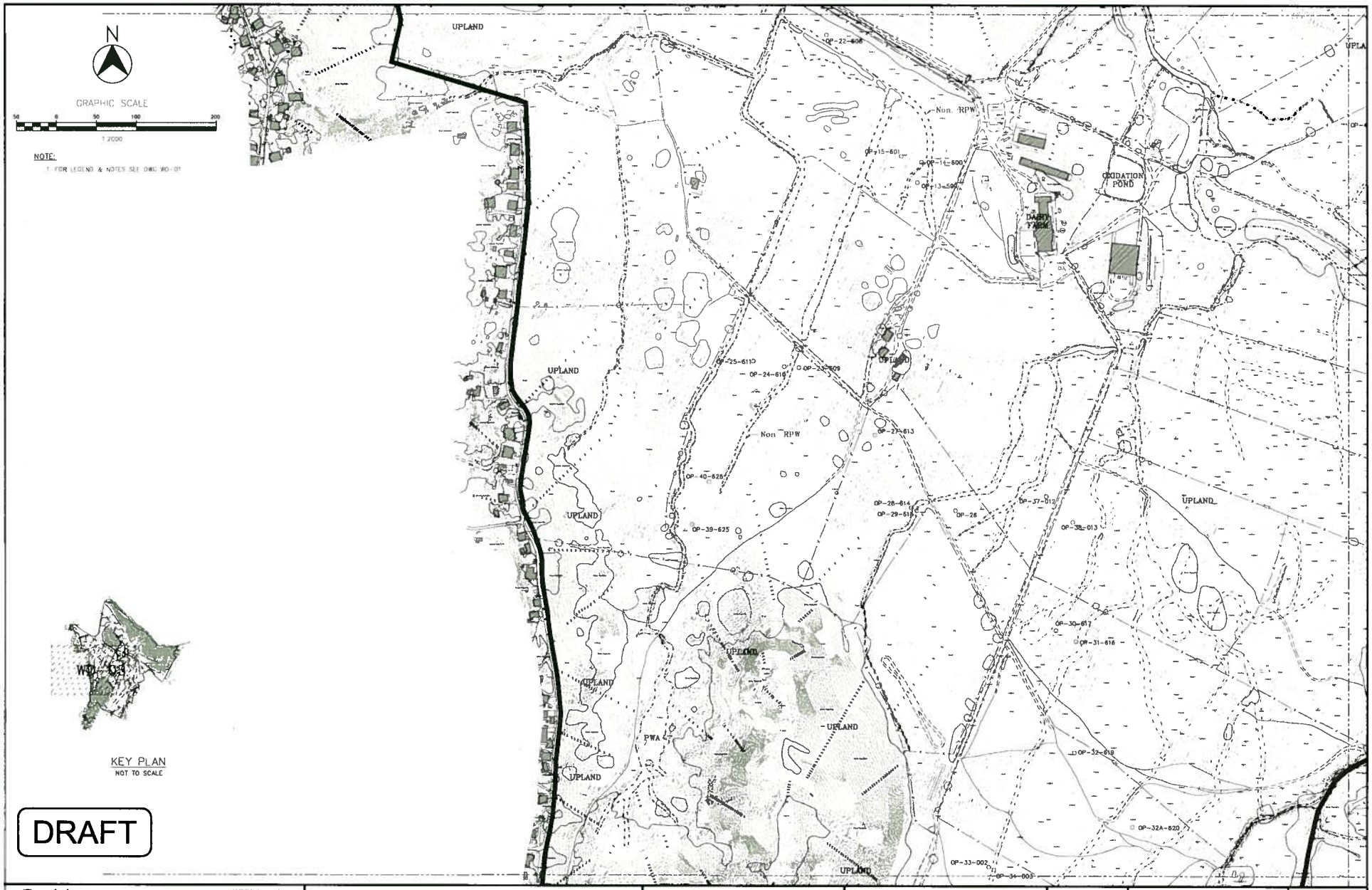
PRELIMINARY WETLAND & STREAMS PLAN
TITLE

WD-02
REVISION No. 0

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PRELIMINARY WETLAND & STREAMS PLAN

TITLE

WD-03

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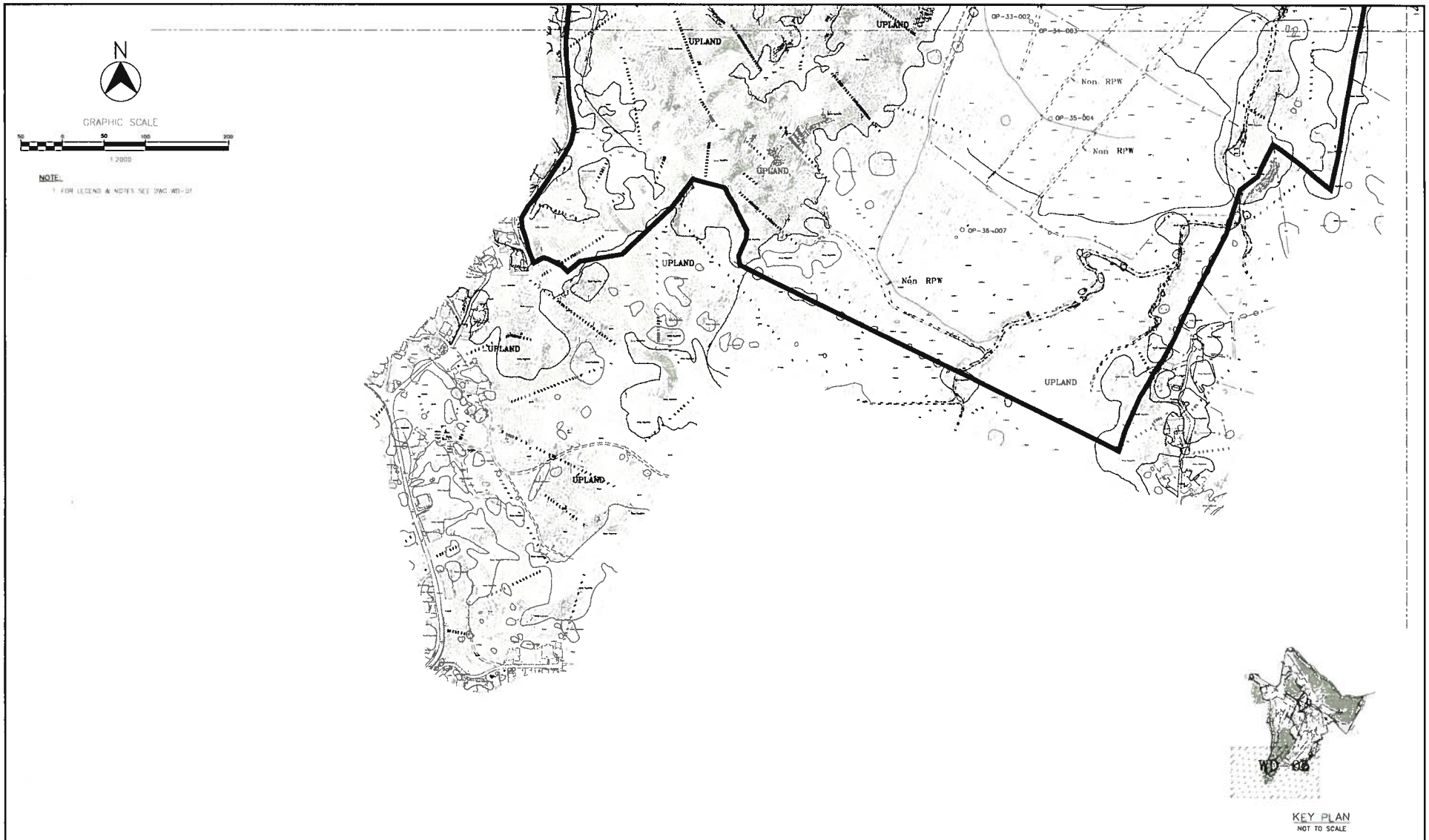
PRELIMINARY WETLAND & STREAMS PLAN

TITLE

WD-04

REVISION No. 0

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# Photos of the Area


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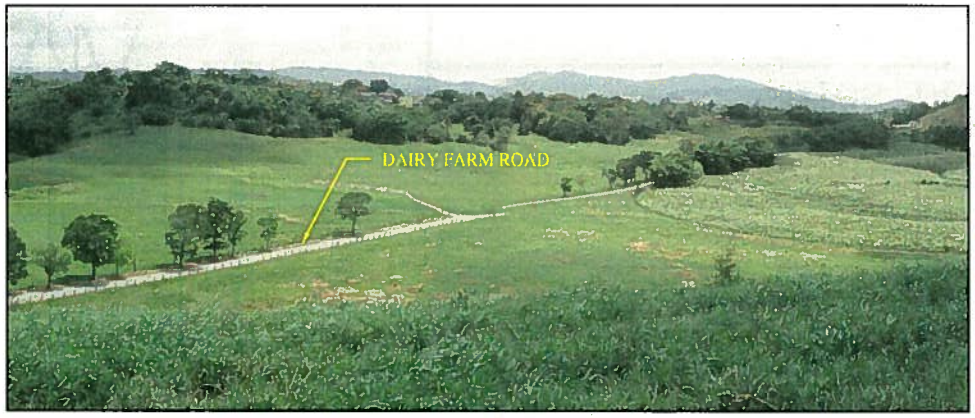


PHOTO No. 1
PASTURE AREA WESTSIDE
OF FARM ENTRANCE ROAD.

PHOTO No. 3
DIRT ROAD NEAR DAIRY FARM
OPERATIONS AREA.

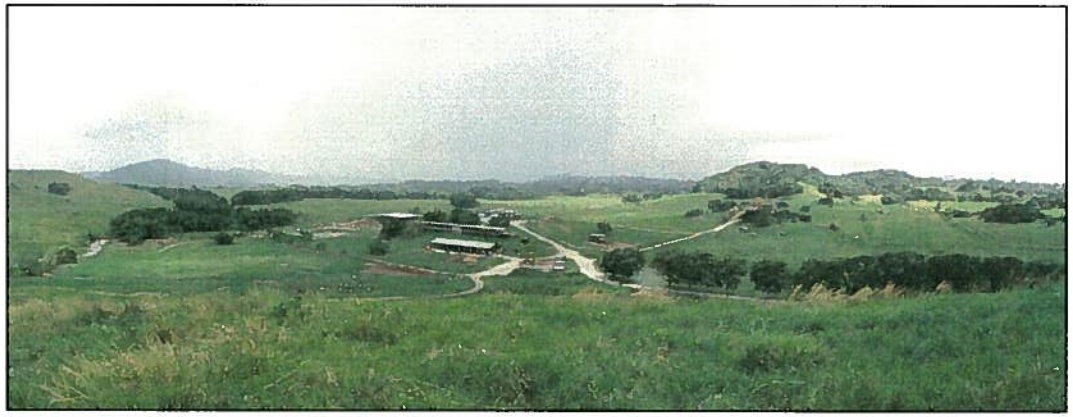

PHOTO No. 2
DAIRY FARM LOOKING SOUTH.

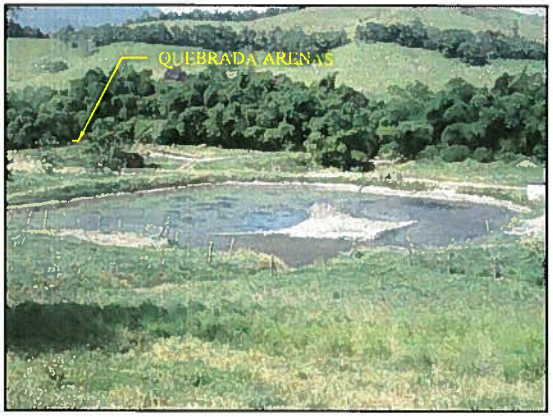


PHOTO No. 4
OXIDATION POND LOOKING WEST.

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# PHOTO OF THE AREA

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SCALE: NTS

DATE: 08/07/12

FIGURE 12

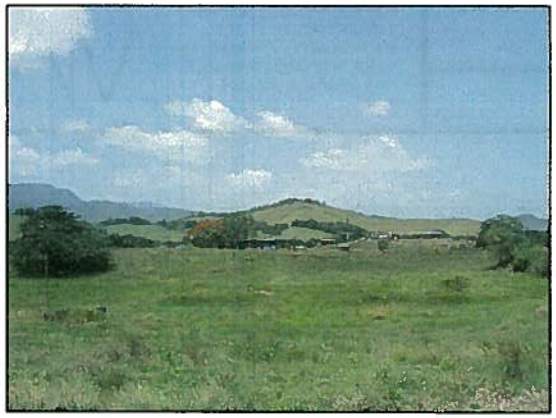

PHOTO No. 5
WESTER SIDE OF FARM LOOKING EAST.

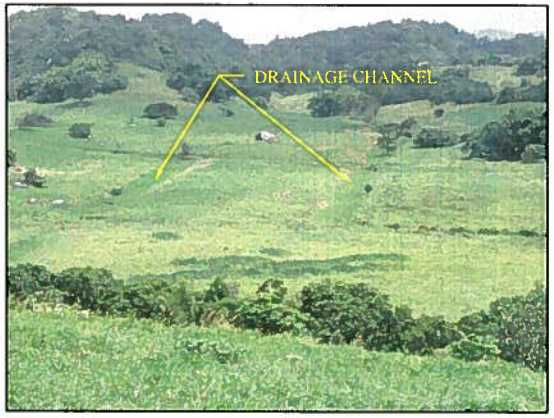


PHOTO No. 6
WEST OF FARM LOOKING SOUTHWEST.

PHOTO No. 7
PASTURE AREA AT THE EAST.

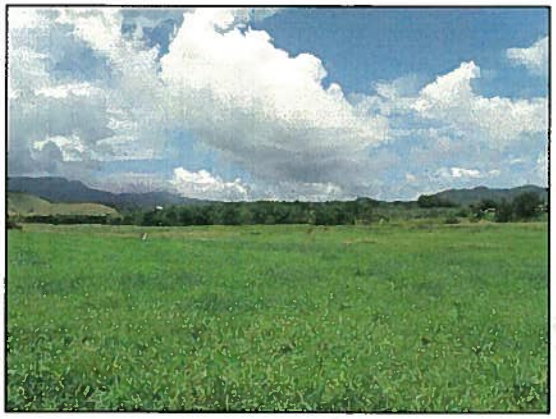

PHOTO No. 8
SOUTH OF FARM LOOKING NORTH.

PHOTO No. 9
NORTHEAST OF FARM LOOKING
SOUTHWEST.

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# FOTOS DEL AREA

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ESCALA: NO A ESCALA

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FIGURA 13

PHOTO No. 10
LOOKING SOUTH OF THE FARM.

PHOTO No. 11
NORTH PASTURE AREA LOOKING SOUTH.

PHOTO No. 12
NORTH SIDE OF FARM LOOKING WEST.

PHOTO No. 13
NORTH SIDE OF FARM LOOKING WEST.

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| PHOTOS OF THE AREA | CMA# 12102 | FIGURE 14 |
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| JUNCOS, PUERTO RICO | DATE: 08/07/12 | |

PHOTO No. 14
EAST SIDE OF FARM LOOKING NORTHEAST.

PHOTO No. 15
DIRT ROAD NORTH SIDE OF FARM. ACCESS ROAD.

PHOTO No. 16
NORTH SIDE OF FARM LOOKING NORTH.

PHOTO No. 17
QUEBRADA ARENAS UPSTREAM.

PHOTO No. 18
CATTLE PRESENT ON FARM.

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PHOTOS OF THE AREA

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DATE: 08/07/12

FIGURE 15

USER: MGR DATE: 10/01/2012 FILE: FIG REV 10-01-12\FIG-15 PHOTOS OF THE AREA.DWG

PHOTO No. 19
OP–1

PHOTO No. 20
OP–1

PHOTO No. 21
OP–2

PHOTO No. 22
OP–2

PHOTO No. 23
OP–3

PHOTO No. 24
OP–3


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# PHOTOS OF THE AREA – OBSERVATION POINTS

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DATE: 08/07/12

FIGURE 16


USER: MCR DATE: 10/01/2012 FILE: FIG REV 10-01-12\FIG-16 PHOTOS OF THE AREA – OP.DWG

PHOTO No. 25
OP-4

PHOTO No. 26
OP-4

PHOTO No. 27
OP-5

PHOTO No. 28
OP-5

PHOTO No. 29
OP-6

PHOTO No. 30
OP-6

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FIGURE 17

DATE: 10/01/2012 FILE: FIG REV 10-01-12\FIG-17 PHOTOS OF THE AREA - OP.DWG
USER: MCS

PHOTO No. 31
OP–7

PHOTO No. 32
OP–7

PHOTO No. 33
OP–7

PHOTO No. 34
OP–7

PHOTO No. 35
OP–8

PHOTO No. 36
OP–8

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FIGURE 18

PHOTO No. 37
OP–9

PHOTO No. 38
OP–10

PHOTO No. 39
OP–10

PHOTO No. 40
OP–10

PHOTO No. 41
OP–11

PHOTO No. 42
OP–12

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FIGURE 19

PHOTO No. 43
OP–12

PHOTO No. 44
OP–12

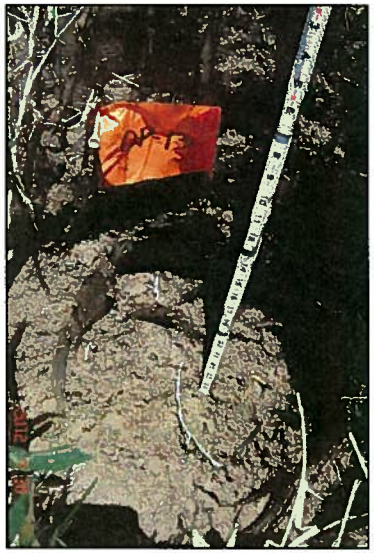

PHOTO No. 45
OP–13

PHOTO No. 46
OP–13

PHOTO No. 47
OP–13

PHOTO No. 48
OP–14


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DATE: 08/07/12

FIGURE 20

PHOTO No. 49
OP–14

PHOTO No. 50
OP–14

PHOTO No. 51
OP–15

PHOTO No. 52
OP–15

PHOTO No. 53
OP–16

PHOTO No. 54
OP–17

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FIGURE 21

PHOTO No. 55
OP–17

PHOTO No. 56
OP–18

PHOTO No. 57
OP–19

PHOTO No. 58
OP–20

PHOTO No. 59
OP–21

PHOTO No. 60
OP–21

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FIGURE 22

PHOTO No. 61
OP–22

PHOTO No. 62
OP–22

PHOTO No. 63
OP–22

PHOTO No. 64
HOOF HOLES

PHOTO No. 65
OP–23

PHOTO No. 66
OP–23

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FIGURE 23

PHOTO No. 67
OP–23

PHOTO No. 68
OP–24

PHOTO No. 69
OP–25

PHOTO No. 70
OP–25

PHOTO No. 71
OP–25

PHOTO No. 72
OP–26

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SCALE: NTS

DATE: 08/07/12

FIGURE 24

PHOTO No. 73
OP–26

PHOTO No. 74
OP–26

PHOTO No. 75
OP–27

PHOTO No. 76
OP–28

PHOTO No. 77
OP–28

PHOTO No. 78
OP–29


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# PHOTOS OF THE AREA – OBSERVATION POINTS

NRG SOLAR JUNCOS LLC.
SOLAR PV GENERATING PLANT

JUNCOS, PUERTO RICO

CMA# 12102

SCALE: NTS

DATE: 08/07/12

FIGURE 25

PHOTO No. 79
OP–29

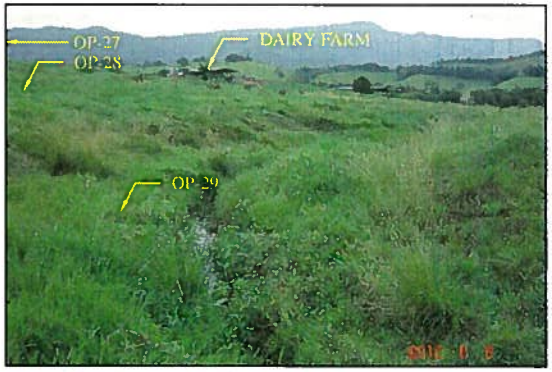


PHOTO No. 80
OP–29

PHOTO No. 81
OP–30

PHOTO No. 82
OP–30

PHOTO No. 83
OP–31

PHOTO No. 84
OP–31

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FIGURE 26

PHOTO No. 85
OP–32

PHOTO No. 86
OP–32

PHOTO No. 87
OP–32

PHOTO No. 88
OP–33

PHOTO No. 89
OP–33

PHOTO No. 90
OP–34

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FIGURE 27

PHOTO No. 91
OP–34

PHOTO No. 92
OP–35

PHOTO No. 93
OP–35

PHOTO No. 94
OP–35

PHOTO No. 95
OP–36

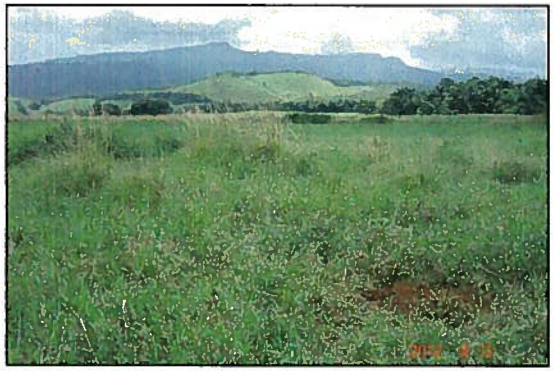

PHOTO No. 96
OP–36

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FIGURE 28

PHOTO No. 97
OP-37

PHOTO No. 98
OP-37

PHOTO No. 99
OP-38

PHOTO No. 100
OP-38

PHOTO No. 101
OP-38

PHOTO No. 102
OP-39

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FIGURE 29

PHOTO No. 103
OP–39

PHOTO No. 104
OP–40

PHOTO No. 105
OP–40

PHOTO No. 106
OP–41

PHOTO No. 107
OP–41

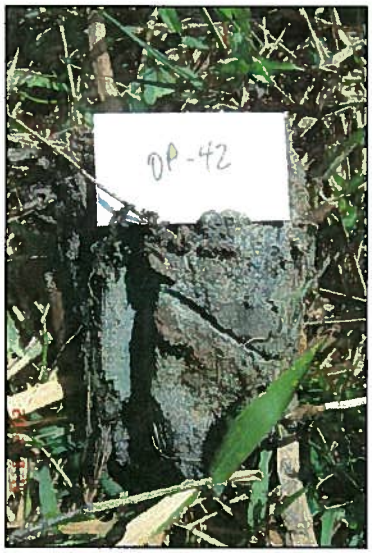


PHOTO No. 108
OP–42

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DATE: 08/07/12

FIGURE 30

PHOTO No. 109
OP–42

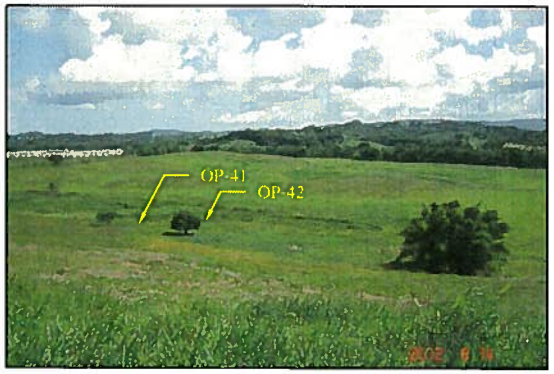


PHOTO No. 110
OP–42

PHOTO No. 111
OP–43

PHOTO No. 112
OP–43

PHOTO No. 113
OP–44

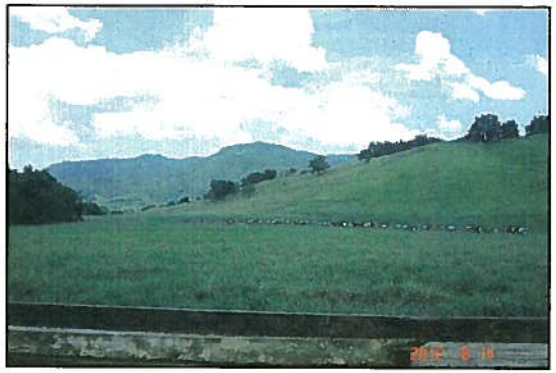

PHOTO No. 114
OP–44

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SCALE: NTS

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FIGURE 31

PHOTO No. 115
OP–44

PHOTO No. 116
OP–44

PHOTO No. 117
OP–45

PHOTO No. 118
OP–45


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SCALE: NTS

DATE: 08/07/12

FIGURE 32

PHOTO No. 119
PORTABLE SPRINKLER

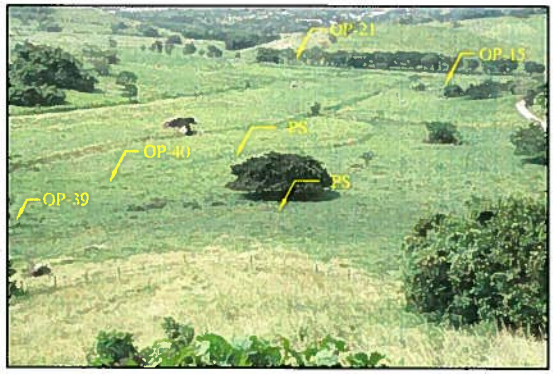


PHOTO No. 120

PHOTO No. 121

PHOTO No. 122
INUNDATED AREA

PHOTO No. 123

PHOTO No. 124

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PHOTOS OF THE AREA – IRRIGATION ACTIVITIES

NRG SOLAR JUNCOS LLC.
SOLAR PV GENERATING PLANT

JUNCOS, PUERTO RICO

CMA# 12102

SCALE: NTS

DATE: 08/07/12

FIGURE 33

PHOTO No. 125

PHOTO No. 126

PHOTO No. 127

PHOTO No. 128

PHOTO No. 129

PHOTO No. 130
IRRIGATION PIPELINE FOR SPRINKLERS

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PHOTOS OF THE AREA – IRRIGATION ACTIVITIES

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DATE: 08/07/12

FIGURE 34

PHOTO No. 131
QUEBRADA ARENAS

PHOTO No. 132
CHANNELS

PHOTO No. 133
CHANNELS

PHOTO No. 134
TRIBUTARY

PHOTO No. 135
TRIBUTARY

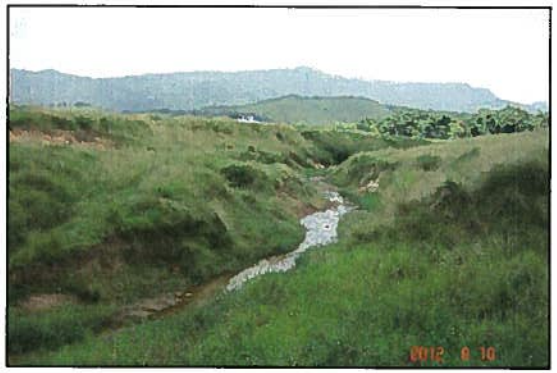

PHOTO No. 136
TRIBUTARY


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PHOTOS OF THE AREA – QUEBRADA ARENA & TRIBUTARY

NRG SOLAR JUNCOS LLC.
SOLAR PV GENERATING PLANT

JUNCOS, PUERTO RICO

CMA# 12102

SCALE: NTS

DATE: 08/07/12

FIGURE 35

PHOTO No. 137
CHANNELS

PHOTO No. 138
STREAMS

PHOTO No. 139
STREAMS


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PHOTOS OF THE AREA – QUEBRADA ARENA & TRIBUTARY

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FIGURE 36

## Appendix No.1
## Wetland Determination Data Forms – Caribbean Island Region Version 2.0


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(5) Diff. wet. Jimaiwo

# WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km 19.7 Municipality/Town: Juncos Sampling Date: Jul. 17, 2012

Applicant/Owner: NRG PR or USVI: PR Sampling Point: OP-01

Investigator(s): José Sepulveda, Juan Fernández (MP) Ward/Estate: Ceiba Norte, PR

Landform (hillslope, terrace, etc.): flood plain / Slope Local relief (concave, convex, none): Concave Slope (%): 5-12

Lat: N18° 13' 23.2 Long: W 65° 53' 14.3" Datum: _____

Soil Map Unit Name: CdB Candelero 2 to 5 percent slopes NWI classification: Not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | Is the Sampled Area within a Wetland? Yes _____ No ✓ |
| Hydric Soil Present? | Yes _____ | No _____ | |
| Wetland Hydrology Present? | Yes ✓ | No _____ | |

Remarks: The area is used for pasture & the grass species are managed.

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Sapling/Shrub Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Herb Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. Alysicarpus vaginalis | 4 | No | FAC |
| 2. Geeschynomene sensitiva | 3 | No | OBL |
| 3. Cyperus brevifolius | 3 | No | FAC |
| 4. Paspalum conjugatum | 90 | Yes | FAC |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | 100 = Total Cover | | |

| Woody Vine Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | |
|---|---|---|---|
| OBL species | 3 | x 1 = | 3 |
| FACW species | | x 2 = | |
| FAC species | 97 | x 3 = | 291 |
| FACU species | | x 4 = | |
| UPL species | | x 5 = | |
| Column Totals: | 100 (A) | | 294 (B) |

Prevalence Index = B/A = 2.94

**Hydrophytic Vegetation Indicators:**

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No X

Remarks: Areas affected by grazing * Problematic hydrophytic vegetation procedure 4(b)(4)

## SOIL

Sampling Point: OP-1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-4 | 10YR4/2 | | 10YR2/1 | | C | M | loam | |
| 4-10 | 10YR4/2 6/2 | | 7.5YR5/6 | | C | PL | | |
| 10-18 | 10YR4/2 6/2 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes _____ No _____

Remarks: Problematic Hydric Soil
Soils with relic or inferred hydric soil recovery procedure #2
concretions, mineral grains

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The area is irrigated for pasture recovery.

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km 19.7 Municipality/Town: Juncos Sampling Date: Jul. 17, 2012

Applicant/Owner: NRG PR or USVI: PR Sampling Point: OP-02

Investigator(s): José Sepulveda Juan Fernandez CMA Ward/Estate: Ceiba Norte PR

Landform (hillslope, terrace, etc.): floodplain / slope Local relief (concave, convex, none): concave Slope (%): 5-12

Lat: N18° 13' 23.2 Long: W65° Datum: _____

Soil Map Unit Name: CdB Candelero 2 to 5 percent slopes NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ____ | No ✓ | Is the Sampled Area within a Wetland? Yes ____ No ____ |
| Hydric Soil Present? | Yes ____ | No ____ | |
| Wetland Hydrology Present? | Yes ____ | No ____ | |

Remarks: The area is used for cattle grazing. Grass species are managed. The area is located on a slope.

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: ____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | ____ = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: ____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | ____ = Total Cover | | |
| **Herb Stratum (Plot size: ____)** | | | |
| 1. Sporobolus Junceus | 100 | Yes | NI |
| 2. Paspalum Conjugatum | | Yes | FAC |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | 100 = Total Cover | | |
| **Woody Vine Stratum (Plot size: ____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | ____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: |
|---|---|---|
| OBL species | ____ | x 1 = ____ |
| FACW species | ____ | x 2 = ____ |
| FAC species | ____ | x 3 = ____ |
| FACU species | ____ | x 4 = ____ |
| UPL species | ____ | x 5 = ____ |
| Column Totals: | ____ (A) | ____ (B) |

Prevalence Index = B/A = ____

**Hydrophytic Vegetation Indicators:**

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ____ No ✓

Remarks: Sporobolus is the dominant species.

## SOIL

Sampling Point: CP-02

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-4 | 10YR 4/3, 4/2 | 50 | 10YR 3/1 | | C | M | | Loam |
| 9-12 | 10YR 6/1 | 50 | 10YR 4/1 | | C | M | | Sandy clay |
| | 10YR 4/3 | 50 | | | | | | |
| 12-18 | 10YR 4/1, 5/6 | 50 | 10YR 3/1 | | C | M PL | | Sandy clay loam |
| 18 | 5GY 6/1 | | 5YR 4/4 | | C | M | | |
| | | | 10YR 6/6 | | C | PL, M | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ____ No ✓

Remarks: Sandy Redox below 9"
Redox concentrations below 4"
The area is irrigated by sprinklers for forage production

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR - 935 Km. 19.7 Municipality/Town: Juncos Sampling Date: Jul. 17, 2012

Applicant/Owner: NRG PR or USVI: PR Sampling Point: OP-3

Investigator(s): Tor Sepulveda Juan Fernandez CMA Ward/Estate: Ceiba Norte, PR

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope (%): 5

Lat: _____ Long: _____ Datum: NAD 83

Soil Map Unit Name: C&B NWI classification: Not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | **Is the Sampled Area within a Wetland?** Yes _____ No ✓ |
| Hydric Soil Present? | Yes _____ | No ✓ | |
| Wetland Hydrology Present? | Yes _____ | No ✓ | |

Remarks:

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Sapling/Shrub Stratum** (Plot size: _____) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Herb Stratum** (Plot size: _____) | | | |
| 1. Paspalum conjugatum | | | FAC |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | _____ = Total Cover | | |
| **Woody Vine Stratum** (Plot size: _____) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ✓ No _____

Remarks:

## SOIL

Sampling Point: CP-3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-12 | 10YR 4/2 | | 10YR 3/1 | | C | M | | |
| 12-18 | 10YR 4/2 | 50 | | | | | | |
| | 10YR 6/1 | 50 | 10YR 5/6 | | | | | |
| 16-18 | 10YR 6/1 | | 10YR 4/4 | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes _____ No ✓

Remarks: Similar to redox concentrations. The area is irrigated by sprinklers maybe some indicators are present for that condition.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Area irrigated by sprinklers for pasture recovery. Located on a slope near a drainage.

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km. 19.7 Municipality/Town: Juncos Sampling Date: Jul, 17, 2012

Applicant/Owner: NRG CMA PR or USVI: PR Sampling Point: OP-04

Investigator(s): José Sepulveda Juan Fernández Ward/Estate: Ceiba Norte PR

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): _____ Slope (%): 5

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdB NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ✓ | No _____ | Is the Sampled Area within a Wetland? Yes _____ No ✓ |
| Hydric Soil Present? | Yes _____ | No ✓ | |
| Wetland Hydrology Present? | Yes _____ | No ✓ | |

Remarks: The area is irrigated with sprinklers for forage production.

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Sapling/Shrub Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Herb Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. Paspalum conjugatum | 97 | Yes | FAC |
| 2. Cyperus iria | 2 | Yes | FAC |
| 3. Aeschynomene sensitiva | 1 | No | OBL |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | 100 = Total Cover | | |

| Woody Vine Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: |
|---|---|---|
| OBL species | 1 | x 1 = 1 |
| FACW species | | x 2 = |
| FAC species | 99 | x 3 = 297 |
| FACU species | | x 4 = |
| UPL species | | x 5 = |
| Column Totals: | 100 (A) | 298 (B) |

Prevalence Index = B/A = 2.98

**Hydrophytic Vegetation Indicators:**

✓ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

✓ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ✓ No _____

Remarks: The area is used for cattle grazing

## SOIL

Sampling Point: OP-4

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-4 | 10YR 4/2 | | 10YR 4/1 | | C | M | | loam |
| 4-10 | 10YR 4/2 | 5/2 | 7.5YR 5/6 | | | | | |
| 10-16 | 10YR 4/2 | 50 | 10YR 5/8 | | | | | |
| | 10YR 4/1 | 70 | 10YR 4/4 | | C | M | | Sandy clay loam |
| 16-18 | 5GY 4/1 | | 5YR 4/6 | | C | M | | |
| 18-24 | | | 10YR 4/6 | | C | M | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ___ No ✓

Remarks: Redox concentration

OP near sprinkler connection. Maybe colors are caused by intensive irrigation activities.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- X Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 12

**Wetland Hydrology Present?** Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The area is irrigated with sprinklers

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km 19.7 Municipality/Town: Juncos Sampling Date: Jul 17, 2012

Applicant/Owner: NRG PMA PR or USVI: PR Sampling Point: DP-5

Investigator(s): Jose A. Sepulveda, Juan Fernandez Ward/Estate: Pedro Nieto

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): slope Slope (%): 5

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdC2 NWI classification: Not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | Is the Sampled Area within a Wetland? Yes _____ No ✓ |
| Hydric Soil Present? | Yes ✓ | No _____ | |
| Wetland Hydrology Present? | Yes ✓ | No _____ | |

Remarks: Grazing parcel. DP located within sprinkler range.

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Sapling/Shrub Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |

| Herb Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. Paspalum conjugatum | | | FAC |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | _____ = Total Cover | | |

| Woody Vine Stratum (Plot size: _____) | | | |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No ✓

Remarks: cattle grazing

## SOIL

Sampling Point: CP-5

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-10 | 10YR 4/2 | | 10YR 2/1 | | C | M | | loam |
| 10-18 | 10YR 6/1 | | 10YR 5/8, 4/2 | | C | M | | sandy clay loam |
| 18-24 | 5GY 6/1 | | 10YR 5/6 | | C | M | | " |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ✓ No ___

Remarks:

redox concentration
(maybe soil condition caused by intensive irrigation

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 18

**Wetland Hydrology Present?** Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

area irrigated by sprinklers. located near drainage.

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km 19.7 Municipality/Town: Juncs Sampling Date: Jul 17, 2012

Applicant/Owner: NRG CMA PR or USVI: PR Sampling Point: OP-6

Investigator(s): José Sepulveda, Juan Fernandez Ward/Estate: Ceiba Neft

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): slope Slope (%): 5

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdC2 NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ____ | No ✓ | Is the Sampled Area within a Wetland? Yes ____ No ✓ |
| Hydric Soil Present? | Yes ____ | No ____ | |
| Wetland Hydrology Present? | Yes ____ | No ____ | |

Remarks: Grazing Parcel

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | ____ = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | ____ = Total Cover | | |
| **Herb Stratum (Plot size: _____)** | | | |
| 1. Paspalum conjugatum | | Yes | FAC |
| 2. Physicarpus vaginalis | | NO | FAC |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | ____ = Total Cover | | |
| **Woody Vine Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | ____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species ____ | x 1 = ____ |
| FACW species ____ | x 2 = ____ |
| FAC species ____ | x 3 = ____ |
| FACU species ____ | x 4 = ____ |
| UPL species ____ | x 5 = ____ |
| Column Totals: ____ (A) | ____ (B) |

Prevalence Index = B/A = ____

**Hydrophytic Vegetation Indicators:**

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ____ No ✓

Remarks:

## SOIL

Sampling Point: OP-6

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-4 | 10YR 3/3 | | 10YR 2/1 | | C | M | | loam |
| 4-8 | 10YR 4/2 | | | | | | | |
| 9-12 | 10YR 4/2 | | | | | | | |
| | 2.5Y 5/4 | | | | | | | |
| 12-18 | 10YR 4/4 | | 10YR 5/8 | | C | M | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ___ No ✓

Remarks: few Redox concentrations

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- few X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR-935 Km. 19.7 Municipality/Town: Juncos Sampling Date: July 19, 2012

Applicant/Owner: NRG PR or USVI: PR Sampling Point: CP-7

Investigator(s): José Sepulveda, Juan Fernandez (INA) Ward/Estate: Ceiba Norte

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope (%): _____

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdB NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | **Is the Sampled Area within a Wetland?** Yes _____ No ✓ |
| Hydric Soil Present? | Yes ✓ | No _____ | |
| Wetland Hydrology Present? | Yes ✓ | No _____ | |

Remarks: Concave area with irrigation water. CP within range of various sprinklers

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Herb Stratum (Plot size: _____)** | | | |
| 1. Paspalum conjugatum | | | FAC |
| 2. Panicum hirsutum | | | FAC |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | _____ = Total Cover | | |
| **Woody Vine Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No ✓

Remarks:

## SOIL

Sampling Point: OP-7

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-8 | 10YR 3/2 | | | | | | | |
| 8-11 | 10YR 3/2 | | 10YR 4/3 | | C | M | | sandy loam |
| | 10YR 6/1 | | 10YR 5/4 | | C | M | | sandy clay loam |
| | | | 10YR 5/8 | | C | M | | |
| 11-30 | 10YR 6/1 | | | | | | | |
| | 5G4 6/1 | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ✓ No ___

Remarks: Depleted Matrix below 8". Redox Concentration. The area is irrigated intensively

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- X Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 18

**Wetland Hydrology Present?** Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Area is used for grazing and irrigated with portable sprinklers.

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR 935 Km. 197 Municipality/Town: Juncos Sampling Date: July 19, 2012

Applicant/Owner: NRCS CMA PR or USVI: PR Sampling Point: DP-8

Investigator(s): José Sepulveda, Juan Fernandez Ward/Estate: Ceiba Norte

Landform (hillslope, terrace, etc.): Slope/Flat Local relief (concave, convex, none): concave Slope (%): 2

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdC2 NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | Is the Sampled Area within a Wetland? Yes _____ No ✓ |
| Hydric Soil Present? | Yes ✓ | No _____ | |
| Wetland Hydrology Present? | Yes ✓ | No _____ | |

Remarks: Small area affected by irrigation

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Herb Stratum (Plot size: _____)** | | | |
| 1. Paspalum conjugatum | | | FAC |
| 2. Cyperus brevifolius | | | FACW |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | _____ = Total Cover | | |
| **Woody Vine Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No ✓

Remarks:

## SOIL

Sampling Point: CP-8

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-8 | 10YR 3/2 | | | | | | | |
| 8-12 | 10YR 3/2 | | 10YR 4/1 | | C | M | | |
| | | | 10YR 4/3 | | | | | |
| | | | 10YR 5/4 | | | | | |
| | | | 10YR 5/6 | | | | | |
| 13-30 | 10YR 6/1 | | | | | | | |
| | 5GY 6/1 | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Organic Bodies (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ Muck Presence (A8)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ Stratified Layers (A5)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ✓ No ___

Remarks: Redox Concentrations below 13" [illegible] indicators. Indicators may be present by the intensive irrigation activities

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Fiddler Crab Burrows (C10)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 18

**Wetland Hydrology Present?** Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Area affected by irrigation. depression in a small area.

## WETLAND DETERMINATION DATA FORM – Caribbean Islands Region

Project/Site: PR - 935 Km. 19 7 Municipality/Town: Juncos Sampling Date: July 19, 2012

Applicant/Owner: NRG CMA PR or USVI: PR Sampling Point: EP-9

Investigator(s): Josi Sepulveda. Juan Fernandez Ward/Estate: Ceiba NORTE

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Slope Slope (%): _____

Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: CdB NWI classification: not classified

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No ✓ | **Is the Sampled Area within a Wetland?** Yes _____ No ✓ |
| Hydric Soil Present? | Yes _____ | No ✓ | |
| Wetland Hydrology Present? | Yes _____ | No ✓ | |

Remarks: Area higher near PR2 soil type

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | _____ = Total Cover | | |
| **Herb Stratum (Plot size: _____)** | | | |
| 1. Cynodon plectostachyus | | | NI |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | _____ = Total Cover | | |
| **Woody Vine Stratum (Plot size: _____)** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | _____ = Total Cover | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No ✓

Remarks: